REPORT RESUMES

ED 013 893 VT 001 195

FEED SALES AND SERVICEMAN. TEACHERS COPY.
BY- WIGGS, J.T.
TEXAS A AND M UNIV., COLLEGE STATION
TEXAS EDUCATION AGENCY, AUSTIN

PUB DATE 66
EDRS PRICE MF-$0.75 HC NOT AVAILABLE FROM EDRS. 191P.

DESCRIPTORS- *VOCATIONAL AGRICULTURE, *COOPERATIVE EDUCATION, *FEED INDUSTRY, *AGRICULTURAL SUPPLY OCCUPATIONS, OCCUPATIONS, *STUDY GUIDES, TESTS, ANSWER KEYS, BIBLIOGRAPHIES,

THE PURPOSE OF THIS DOCUMENT IS TO PROVIDE A GUIDE TO STUDY FOR VOCATIONAL AGRICULTURE COOPERATIVE EDUCATION STUDENTS PREPARING FOR EMPLOYMENT IN FEED SALES AND SERVICE. THE MATERIAL WAS DESIGNED BY SUBJECT MATTER SPECIALISTS ON THE BASIS OF STATE ADVISORY COMMITTEE RECOMMENDATIONS, TESTED IN OPERATIONAL PROGRAMS, AND REFINED. UNITS IN THE COURSE ARE -- (1) AGRICULTURAL SALESMANSHIP, (2) FEED BUSINESS ORGANIZATION AND FUNCTION, (3) BUSINESS PROCEDURES, (4) SERVICE FUNCTIONS, (5) REGULATIONS, (6) RATION FORMULATION, (7) FEED PREPARATION, AND (8) RELATED AGRICULTURAL SUPPLIES AND SERVICE. THE COURSE IS DESIGNED FOR 175 PERIODS OF 50 MINUTES, FOR MALE AND FEMALE STUDENTS, 16 TO 20 YEARS OF AGE, WHO ARE EMPLOYED PART-TIME IN THE INDUSTRY. SUPPLEMENTAL TEXTBOOKS, BULLETINS, AND COMMERCIAL DATA ARE NECESSARY, AND LISTS ARE PROVIDED IN THE DOCUMENT. THE PRINTED DOCUMENT IS LOOSELEAF. THIS DOCUMENT IS AVAILABLE IN LIMITED NUMBERS FOR $2.50 EACH FROM AGRICULTURAL EDUCATION TEACHING MATERIALS CENTER, TEXAS AGRICULTURAL AND MECHANICAL UNIVERSITY, COLLEGE STATION, TEXAS 77843. (JM)

AGRICULTURAL EDUCATION

Agricultural Cooperative Training

VOCATIONAL AGRICULTURE

ED013893

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TRY
NURSERY
HORTICULTURE
FRUIT AND VEGETABLE PACKING
FEED AND SEED
GARDEN SUPPLY CENTER
FERTILIZER
FEED
MEAT, POULTRY, AND FISH PROCESSING
IRRIGATION
TEXAS
TEX
ASSISTANT TO PROFESSIONALS
AGRICULTURAL MACHINERY

923: Feed Sales & Serviceman

Teachers Copy

DATE ____________ CLASS ____________

VT011195

ACKNOWLEDGEMENT

This course of study is designed for the vocational agriculture student of Texas who is enrolled in a Cooperative Part-time Training Program in Agriculture.

Much of the material for this course was prepared by J. T. Wiggs, Vocational Agriculture Teacher of Wills Point, Texas, who assisted at the Teaching Materials Center for a four-week period during the summer of 1966.

Members of the staff of the Teaching Materials Center contributed also to the preparation of the course of study.

Several sections of the materials are based upon work produced at the Center for Research and Leadership Development in Vocational and Technical Education at The Ohio State University, Columbus, Ohio.

John Holcomb, Coordinator
Teaching Materials Center

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-1

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Introduction, Agricultural Salesmanship

OBJECTIVE: To develop an understanding of the importance of salesmanship in agricultural business.

REFERENCES: Required:

1. Information Sheet, "Agricultural Salesmanship"

Supplemental:

2. Feed and Farm Supplies, The University of Texas, Division of Extension, Distributive Education Division, Austin, Texas
3. Salesmanship Fundamentals, Ernest and Davall, 2nd edition, McGraw-Hill Book Co., New York, N. Y.
4. Let's Analyze and Sell, The University of Texas, Division of Extension, Distributive Education Division, Austin, Texas

QUESTIONS or ACTIVITIES:

1. Name and give an example from your experience of three reasons customers fail to buy.
2. What are the main differences between need and desire for a product?
3. What six things must the agricultural salesman know to be successful?
4. Give five principal advantages of agricultural sales as a career.
5. What is one of the best forms of advertising?
6. Who benefits from efficient selling?

UNIT: Agricultural Salesmanship
TOPIC: Introduction, Agricultural Salesmanship
(Assignment Sheet continued)

7. Good sellind does two things connected with human wants. What are the two?

8. What five basic decisions are made by a customer before purchasing an item?

9. What product should be sold to a customer?

10. Give two things that help to make permanent customers.

11. Give a good short definition of "selling".

Agricultural Education
Teaching Materials Center
College Station, Texas

920-I-1

******

Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
AGRICULTURAL SALESMANSHIP

Selling is the key function of all business activity. This is as true in agriculture as in other areas. Selling is the act of assisting and persuading individuals or groups to make a buying decision which is to the mutual advantage of both the buyer and the seller.

Selling is really explaining to, persuading, and reminding the public of a particular business concern and of the opportunities and values to be gained from doing business with this concern.

The retailer's function is that of selling goods and services to the ultimate consumer. This is the final step in the distribution of agricultural goods and services.

Efficient salesman realize that customers are lost because of:

1. Poor service rendered
2. Discourteous treatment received
3. Indifferent attitude exhibited on the part of the salesman

The salesman must know the psychology of selling if he is to become a successful salesman. In other words, he knows that a customer buys primarily because of need and desire. These are influenced by reason, by emotion, or by a combination of these. A person may need something, but does not buy until he desires it, i.e.,,, he feels the need.

In summary, to be usccessful, the agricultural salesman must know the selling process, the merchandise itself, and the firm, as well as understand himself, his relations to the customer, and the customer.

Here is an opportunity for a salesman to (a) deal directly with the public, (b) help other people make decisions, (c) face something new everyday, (d) know that his worth is quickly recognized in terms of advancement, and (e) enjoy the prestige of big business. This big business is made up of over 1,700,000 retail stores where Americans spend 70 percent of the family income each year.

Agricultural Salesmanship
(Information Sheet continued)

Good selling does not happen incidentally, but is the result of sound training.

Successful selling produces a satisfied customer who in turn becomes the best form of advertising.

The good salesman must realize that everyone benefits from efficient selling. High sales volume not only insures the salesman's position, but also lowers the price of products or services to the customer.

Good selling awakens and satisfies human wants. Selling is a challenge and every customer is an opportunity for a salesman to get positive reaction from the customer on five basic buying decisions, namely; the need, the thing, the source, the price, and the time. Selling is helping the customer to buy intelligently.

The customer will gain the most personal satisfaction from his purchase if the salesman makes sure that the product will best fit the customer's need. When the salesman demonstrates courtesy and a sincere interest to be of service, the result is a permanent customer.

*****

Material for this Information Sheet was taken from Module 4, Agricultural Supply-Sales and Service Occupations, The Center for Research and Leadership Development in Vocational and Technical Education, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-2

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Meeting the Customer

OBJECTIVE: To develop an understanding of the importance and techniques in making a good impression with customers.

REFERENCES: Required:

1. Information Sheet, "Meeting the Customer"

Supplemental:

2. Let's Analyze and Sell, The University of Texas, Division of Extension, Distributive Education, Division, Austin, Texas
3. Feed and Farm Supplies, The University of Texas, Division of Extension, Distributive Education Division, Austin, Texas

QUESTIONS
or

1. Why is the first contact with a customer very important?
2. Why should a salesman be well-groomed?
3. Why should a salesman like his work?
4. Give three "earmarks" of good salesmanship.
5. Give a short description of the proper way to treat a customer.
6. Select one of your classmates that you know well and fill out the "information needed about a customer" given in part 1-a of the information sheet you are using.
7. How could you secure the information you gave in question 6 if you did not know the person well, and if he were an adult?

8. Pick a store (not the one in which you work) in which you purchased something recently and give your impressions about these characteristics of the store:
   a. Was the store neat and attractive? What made it appear that way?
   b. Was the store well-lighted?
   c. Did the equipment (not the merchandise) look good to you? Why or why not?
   d. Was the merchandise arranged in a manner you understood, or was it confusing to you? Why?
   e. Did the person who "waited upon you" have a pleasing appearance? Briefly describe him as he appeared that day.
9. Pick an item from the store in which you work or plan to work and give from memory these characteristics of the product:
   a. Why is it designed as it is?
   b. The trade name
   c. How it is constructed or manufactured
   d. Its special features
   e. In what other forms it is available
   f. What help the store can give if something "goes wrong" with the product
10. Now pick an item your family purchased recently from another store and give the same information as you gave in No. 9 from memory about it.
11. List the preparation a salesman needs to make before he is ready to make a sale.
12. What may cause a salesman to fail to be prompt in greeting a customer?
13. How does the salesman find out about a customer's problem?
14. Give three examples of proper methods of greeting a customer
15. Give the elements of a good salutation to a customer.
16. Name 11 physical and physiological factors that cause a customer to want to buy a product.
17. Give eight good attitudes for salesmen.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
MEETING THE CUSTOMER

The impression of the agricultural business that the customer carries away often results from his first contact with the salesman. Appearance and actions play an important part in forming this impression.

A well-groomed salesman attracts customers and inspires their confidence. Undivided attention on the job is essential to good salesmanship.

A good approach presupposes a proper attitude toward the job. Love for one's work is expressed in the enthusiasm with which it is carried out. Enthusiasm is shown through words, actions, and expression.

Salesmanship is demonstrated through promptness, alertness, and interest in the customer and his problems.

Treat the customer like a guest. This means that good manners and courtesy are practiced at all times; that the house is in order, neat and clean; that the merchandise is conveniently located; and that the salesman is trained in the fundamentals of selling to maximize the opportunity of being of service to customers.

Points to be considered when meeting the customer:

1. The preapproach Preparation

   a. Information needed about the customer

      (1) Name - Address
      (2) Personal characteristics
      (3) Mental make-up
      (4) Hobbies and interests
      (5) Common interests
      (6) Buying habits or policies

   b. Sources of this information

      (1) Participation in community activities and events
      (2) Chamber of Commerce information
      (3) Comments made by other members of civic clubs

- (4) A personal notebook on customers
- (5) Past sale records, credit department records
- (6) Interview with people in the community
- (7) Local newspaper

c. Check of facilities and surroundings

- (1) General appearance of the store
- (2) Lighting
- (3) Equipment
- (4) Merchandise arrangement
- (5) Personnel

d. Knowledge of benefits the customer will receive from merchandise sold

- (1) Design or appearance
- (2) Quality of the source - trade name
- (3) Composition and construction
- (4) Special features
- (5) Assortment of sizes, colors, and styles available
- (6) Service available

e. Preparation by the salesman

- (1) Neatness of appearance
- (2) Preparation of an appealing display arrangement
- (3) Knowledge of contents of the merchandise in stock
- (4) Knowledge of the contents of newspaper advertising being circulated
- (5) Knowledge of names, background, and interests of customers
- (6) Knowledge of the competitors product
- (7) Preparation of a few selling sentences
- (8) Preparation of a record of common customer objections and development of methods of meeting them

2. Timing the Approach

a. Importance of the impression created by the salesman's appearance and actions

b. Suggestions for:

- (1) Promptness - clues for failure in being prompt:

(a) Involved group conversations of salesmen
(b) Stock duties
(c) Timidity in approaching customers
(d) Indifference to the needs of the customers

(2) Alertness - based on accurate and careful observation; look for clues on:
(a) How and when to greet the customer
(b) When to present the merchandise
(c) How to talk about merchandise

(3) Interest in customer's problem
(a) Take all the time necessary to understand his problem.
(b) Probe to determine if problem is what customer first says that it is.
(c) Determine the procedure to be followed to assist the customer with his problem.

3. The Proper Approach - Greeting the Customer

a. Type of salutations

(1) Conventional
(2) Question
(3) Stating a fact about the merchandise

b. Elements of a salutation

(1) Courteous
(2) Short
(3) Requires no decision
(4) Affirmative
(5) Emphasizes the desire to serve

c. Tone of voice - pleasant, enthusiastic, distinct, articulate, ordinary

d. Facial expressions

(1) A pleasant smile
(2) Cheerful expression

Different physical and psychological factors, operating alone or together, motivate a customer to buy a product. Among them are comfort, pleasure, appetite, possession, fear, devotion, curiosity, ornamentation, imitation, construction, and loyalty.

Developing the proper attitudes necessary for success in meeting a customer is important if the student is to develop effective sales abilities. Among them are:

1. Developing professional feeling toward selling
2. Constant courtesy
3. Enthusiasm for selling
4. Interest in customer and his problems
5. Willingness to develop self-confidence
6. Developing sincere attitude of service
7. Developing integrity
8. Appreciating proper psychology such as gaining the customer's attention and interest, creating a desire, and ending with deaction on the part of the customer

*****

Material for this Information Sheet was taken from Module 4, Agricultural Supply, Sales and Service Occupations, The Center for Research and Leadership Development in Vocational and Technical Education, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-3

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Presenting Supplies and Services to Customers

OBJECTIVE: To develop an understanding of the steps necessary to a successful sale.

REFERENCES: Required:

1. Information Sheet, "Presenting Supplies and Services to Customers"

Supplemental:

2. Let's Analyze and Sell, Division of Extension, The University of Texas, Austin, Texas

QUESTIONS or ACTIVITIES:

1. Give the four steps in a sale.
2. How does step 1 differ from step 2?
3. What brings about step 3?
4. What are some examples of motivating factors for farmers?
5. Name 4 ways attention is directed to a supply or service.
6. Tell how a potential customer may move from attention to interest to desire.
7. To conclude the sale, what does the salesman need to be able to do to secure action?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-3

Information Sheet
on
PRESENTING SUPPLIES AND SERVICES TO CUSTOMERS

Successful selling requires a careful presentation by the seller. A salesman must recognize the importance of each of the psychological steps in a sale. He must gain the attention, develop interest, kindle desire, and induce action on the part of the customer.

Attracting attention is one thing, developing interest is quite another thing. Attention is more or less involuntary. Almost anything can attract attention; interest is the result of voluntary reaction on the part of the customer. Interest comes only when attention is prolonged voluntarily and is accomplished by concentration.

Next, one must combine the merits of the article with the needs or wants of the customer to kindle desire. Then, by demonstrating a complete understanding of the interest, needs, desires, and motivating factors that cause a customer to buy, the salesman will be able to make a successful sale. Sales are made by showing the farmer how to increase yields, make more profit, or reduce the labor required, etc.

The attention of customers to a supply or service may be secured in many ways.

Reading an advertisement about a beef concentrate
Seeing a new herbicide on a TV commercial
Talking to a neighbor about his new 5-plow tractor
Mailing a circular on early fertilizer purchase discount
Meeting a new petroleum delivery truck on the road
Hearing from a friend about the good service on baler repairs
Reading in the newspaper about a new bulb shipment received at the garden center
Viewing an attractive display of seed at the supply center

Developing interest in a product can be initiated by the customer, the salesman, or serviceman.

Customers can move from the attention, interest, and desire steps very rapidly at times with little or no encouragement. Example - the customer sees a new field sprayer just the size and kind for which he has a preference--the desire is developed. Often, however, the customer's interest in a product needs to be kindled. This can be done by:

Talking to him about the new features on this planter
Inviting him to a field day where the effectiveness of newly developed herbicides will be shown
Showing him the results of this product in test trials
Demonstrating how simple it is to mount this new corn picker
Pointing out to the customer the number of people in the community who are already using this feed, lawn seed, or grease

Desire for a product may be obtained by relating it to a need of the customer,

Explain how this feed will increase net income by improving an animal's rate of gain.
Show him, with proof from variety trials, how the new oat variety will stand, thereby reducing all those combining problems.
Show him that the chemical weed spray will reduce cultivation, allowing time to get the hay harvested, go fishing, etc.
Sell the merits of the tractor seat, not its cost.
Provide appointments for the customer to try the product on a trial basis.

To be able to present items effectively, you will need to:

Know the features of the item.
Be able to answer all questions about the item.
Demonstrate its use, operation, value, and advantages

*****

Material for this Information Sheet was taken from Agricultural Supply-Sales and Service Occupations, Module 4, The Center for Research and Leadership Development in Vocational and Technical Education, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-4

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Overcoming Customer Resistance

OBJECTIVE: To develop an understanding of the reasons for customer resistance and effective methods of overcoming them.

REFERENCES: Required:

1. Information Sheet, "Overcoming Customer Resistance"

Supplemental:

2. Let's Analyze and Sell, Division of Extension, The University of Texas, Austin, Texas

3. Feed and Farm Supplies, Division of Extension, The University of Texas, Austin, Texas

QUESTIONS or ACTIVITIES:

1. Give the "two sides" to every sale.

2. The customer must be convinced that the salesman's product is his best choice, based upon one or more of three factors. What are the three?

3. Give statements that will help overcome customer objection for a product:
   a. Need:
   b. Quality:
   c. Source:
   d. Price:
   e. Time:
   f. Thing:

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
OVERCOMING CUSTOMER RESISTANCE

It is natural for people to have sales resistance. Most of them did not come by the money in their possession easily. It is perfectly natural for people to want to get all they can for the money spent.

Each sale has two sides. The customer must sacrifice something in order to get something else. Since one cannot have everything, each sale means a choice between one product and another product or one product and another form of pleasure.

The customer must decide which of the choices will give the most satisfaction or pleasure.

It is the salesman's job to convince the customer that his product or service will provide this pleasure, satisfaction, or need. If this cannot honestly be done, perhaps he should not make the sale at all. Anything else is high pressure selling that is unethical and cannot be classified as salesmanship. It will invariable lead to ill will and dissatisfaction.

There are several reasons why customers are resistant to purchasing. The first objection is rarely the actual objection. Identify the real reason for such resistance and try to explain away the objection. To do this you are going to need to be well informed on the supply or service. Types of objections are:

1. Need - Objections to need are overcome by stressing the usefulness and benefits of the product.
2. Quality - Objections to quality are overcome by:
    a. Showing a better quality
    b. Pointing out a specific feature
3. Source - Objections to the source are met by:
    a. Providing names and experiences of satisfied customers
    b. Providing information about the company or by reference to national advertising

Overcoming Customer Resistance
(Information Sheet continued)

c. Courteously straightening out misunderstandings

d. Asking for a fair trial of this new firm or by offering something another firm does not carry

e. Others correcting the shortcomings of the salesman if he is at fault

4. Price - Objections to price are overcome by:

   a. Revealing hidden values - building up values

   b. Emphasizing the quality or usefulness

   c. Providing an article that is not as expensive and doesn't have as many selling points

   d. Knowing competitors product so that any question or different values can be explained

5. Time - Objections to time are overcome by:

   a. Making a future appointment

   b. Inviting the customer to look at additional merchandise

   c. Continuing to show a positive interest in the customer whether the salesman is busy or not

   d. Trying to handle objections promptly as they arise

   e. Not trying to close a sale until all bonafide objections have been satisfied. Make feelers during the sales presentation to preclude objections to a reasonable closing of the sale because of the time.

6. Thing - Objections to the thing are overcome by:

   a. Showing more suitable goods

   b. Admitting the validity of objection but showing another feature to offset the objection

Overcoming Customer Resistance
(Information Sheet continued)

c. Admitting that the objection is reasonable but showing that it does not really apply

d. Changing the objection into a selling point in favor of the article

e. Avoiding:

   Generalizations which mean nothing
   Contradiction of a customer's statement
   Display of a negative or discouraging attitude

Again, do not pressure customers to purchase; they are not likely to return if pressured.

*****

Material for this Information Sheet was taken from Agricultural Supply-Sales and Service Occupations, Module 4, The Center for Research and Leadership Development in Vocational and Technical Education, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-5

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Closing the Sale

OBJECTIVE: To develop the ability to secure the final step in the selling process; that of closing the sale.

REFERENCES: Required:

1. Information Sheet, 920-I-5

Supplemental:

2. Feed and Farm Supplies
3. Let's Analyze and Sell

QUESTIONS or ACTIVITIES:

1. When is closing a sale easy and almost automatic?
2. What must be the attitude of the salesman toward his function in closing a sale?
3. When is the salesman justified in making concrete suggestions during the "closing" process?
4. When is the right time to close a sale?
5. What conditions precede sale closing?
6. What is the "choice method" in beginning to close a sale?
7. Give seven errors that often lead to failure to buy.
8. Give four good general points for recording sales.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-5

Information Sheet
on
AGRICULTURAL SALES AND SERVICE

Obviously, closing the sale is the most important of all the steps in the selling process. Everything that has been done so far comes to naught, if the customer leaves without making a purchase. Closing starts at the beginning of the sales presentation and "trial" closes are appropriate as it proceeds.

Customers resent being hurried into making a purchase. The salesman must take an active part in inducing a favorable action on the part of the customer, but his attitude must be one of helping the customer in making a wise decision.

Sales are lost because the salesman fails to tailor the sales presentation to the individual needs and requirements of the customer.

A salesman is performing a useful service by offering suggestions to customers who are not aware of their needs or to customers who rely upon displays to remind them of what they came to purchase.

Anybody can sell a customer something he wants. It takes a salesman to sell the customer needed items of which he was unaware.

Closing the sale will be more or less automatic if the need for the article has been definitely established. One of the salesman's functions is to help the customer decide by making "trial" closures.

Don't trip on the last step. The time to close the sale is just after the customer has decided to buy.

Indications that the customer is making up his mind occur when the customer asks the salesman to repeat the advantages of each item and when he wants unwanted goods removed. This is when the salesman should repeat the advantages of the item in which the greatest interest was shown by the potential customer.

The decision to buy occurs after the following conditions have been met:

1. The customer has exhibited attention, interest, and desire in the product.

2. A relationship between need and the merchandise has been established..
3. All important objections have been overcome.
4. The price is low in comparison with value.
5. The product meets the customer's approval.
6. The customer has the power to make the purchase.

The above decision is reached by taking steps during the presentation to make buying "action" easy. Such steps include leading the customer to make a number of small favorable decisions himself, making these decisions progressively more forceful, seeking agreement more frequently as the presentation progresses, and narrowing the selection. This is done by concentrating upon items in which the customer is interested, by removing merchandise in which the customer is not interested, by repeating demonstrations in more detail, and by soliciting the opinion of others. Always ask for the order. Use the "choice" method in beginning the closing phase, i.e., 2 or 3 dozen.

Failure to close the sale may be due to:

1. Assuming that the customer is not going to buy
2. Hurrying the customer
3. Failing to help the customer decide
4. Stumbling over sales obstacles
5. Stressing the wrong selling points
6. Trying to force action
7. Being discourteous at any point in the process

When engaged in suggestion selling, the salesman must:

1. Make definite suggestions to the potential customer.
2. Give an acceptable justification for the suggestion made.
3. Demonstrate the merchandise thoroughly and unhurriedly.

Agricultural Sales and Service
(Information Sheet continued)

4. Not overwhelming the customer with more facts, decisions, etc., then he can face comfortably

Sales are often increased by displaying related merchandise, handling larger quantities, comparing with higher priced merchandise, introducing new merchandise, developing "special" sales, demonstrating new uses for merchandise, and specializing in merchandise for special occasions.

When recording the sale, the salesman, in preparing the sales check, should:

1. Write legibly.
2. Be accurate with items, amounts, and price.
3. List the complete name and address if needed for files or for delivery.
4. Write down any special directions needed to help the customer.

When operating a cash register, make change accurately. Never put a bill away until the customer is satisfied that he has received the correct change. Use the right compartment for paper money and change. Also, learn to count out change properly.

Just because the register bangs shut does not mean that the sale is completed. A proper, courteous farewell often means repeat visits by the customer.

Give the customer a friendly farewell whether or not he makes a purchase and invite him back soon.

*****

Material for this information sheet was taken from Module No. 4, Agricultural Supply - Sales and Service Occupations, The Center for Research and Leadership Development in Vocational and Technical Education, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-6

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Fundamentals for Successful Selling

OBJECTIVES: To summarize and reinforce the steps in successful selling.

REFERENCES: Required:

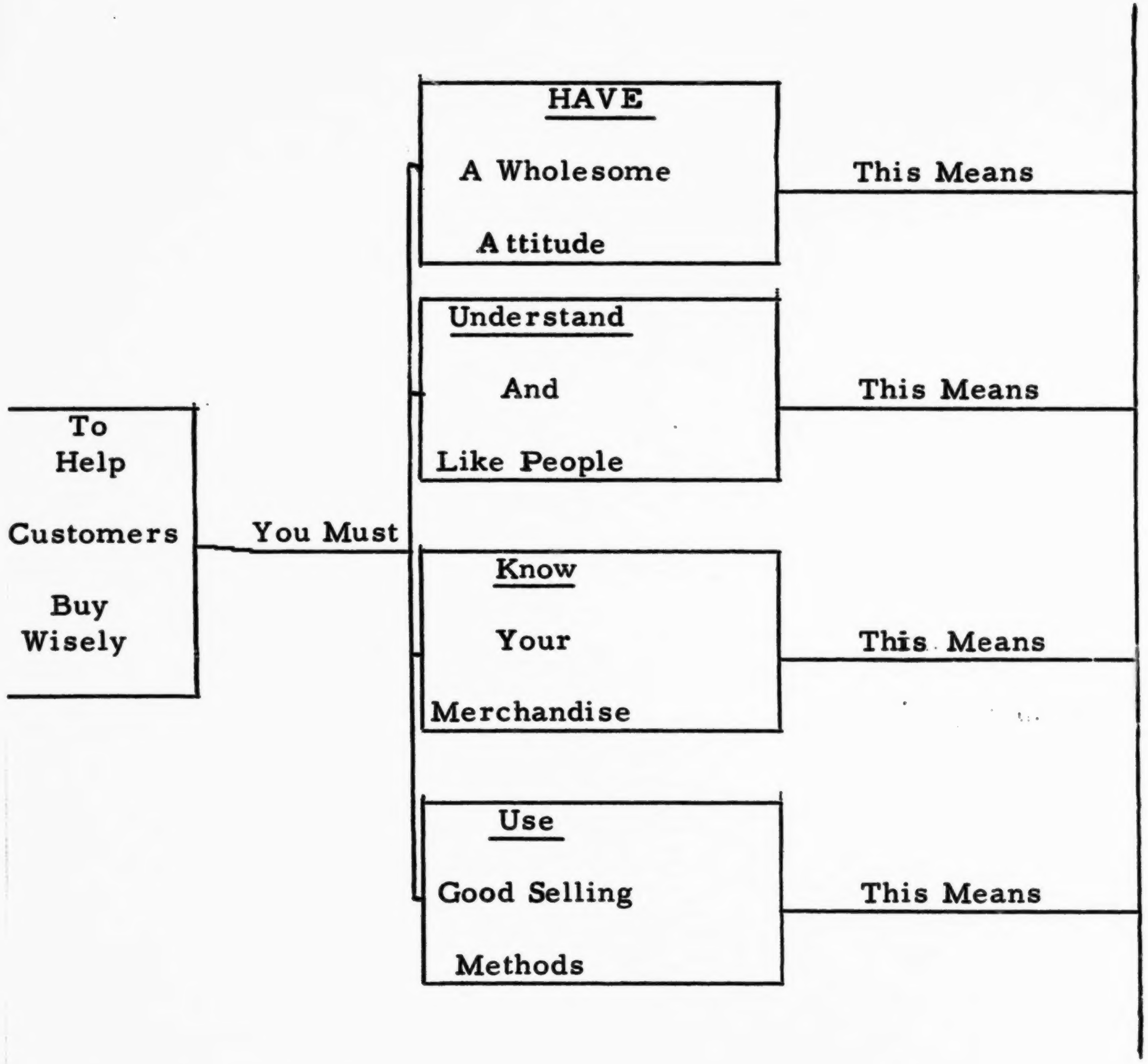
Information Sheet, 920-I-6

QUESTIONS or ACTIVITIES:

1. If you are to be a successful salesman,
    a. What must you have?
    b. What must you understand?
    c. What must you know?
    d. What must you use?
2. Select the three items at the right of the page in which you feel you are strongest. Write a short paragraph on each explaining your strengths.
3. Select three items at the right of the assignment sheet in which you feel you need improvement. Write a paragraph on each, including how you think you can improve.

Information Sheet
for
AGRICULTURAL SALES AND SERVICE

Fundamentals for Successful Selling


To
Help
Customers
Buy
Wisely
You Must
HAVE
A Wholesome
Attitude
This Means
Understand
And
Like People
This Means
Know
Your
Merchandise
This Means
Use
Good Selling
Methods
This Means

1. Keep your personal appearance neat and attractive.
2. Keep enthusiastic about your job.
3. Watch your health.
4. Be helpful to your customers.
5. Be loyal to your store.

1. Get your customers point of view.
2. Serve people as you like to be served.
3. Be courteous, considerate and attentive.
4. Be friendly, but not familiar.
5. Find out what your customer wants.
6. Treat customers as invited guests.

1. Know what your store carries in stock.
2. Know the location of each item carried.
3. Know the facts about the merchandise you sell.
    a. Facts about material
    b. Facts about construction
    c. Special features and qualities
    d. How to care for and use the merchandise
    e. Store's own brands

1. Meet customers promptly and courteously.
2. Present your merchandise with respect and appreciation.
3. Give honest convincing facts about your merchandise.
4. Answer questions and objections fully--help your customers decide.

Courtesy of Fairchild Publishing Company

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT:	Agricultural Salesmanship
TOPIC:	Evaluating Salesmen
OBJECTIVE:	To develop an understanding of the methods employed in evaluating sales personnel and to encourage self-evaluation.
REFERENCES:	Required: Information Sheet, 920-I-7

QUESTIONS or ACTIVITIES:

In the information sheet accompnaying this topic are four check sheets.

Your assignment is to fill out each check sheet, making two marks in each item.

The first mark, a small "x", is your evaluation of a salesman from whom you recently made a purchase. If you wish, use a different salesman for each sheet.

The second mark, a small "o", is your own performance in the place in which your work. Use any customer contact during the past two weeks, and use a different one for each sheet, if you wish, but make an honest appraisal of your performance.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-7

Information Sheet
on
AGRICULTURAL SALES AND SERVICE

Check Sheet -- Customer Approach

	Did so effectively	Did so partially	Did not	Could have
1. APPROACHED CUSTOMER PROMPTLY				
a. Was on the lookout for customers				
b. Stopped what he was doing				
c. Approached the customer mentally and physically				
2. WELCOMED THE CUSTOMER				
a. Smiled				
b. Used appropriate approach				
c. Treated the customer as a guest				
3. HELPED TO START CONVERSATION				
a. Adapted himself to situation				
b. Made comment about merchandise				
c. Anticipated customer's interest				

COMMENTS:

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-1

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Importance of Accurate Records

OBJECTIVE: To develop an understanding of the necessity for accurate business records.

REFERENCES: Required:

1. Information Sheet , 920-III-1

Supplemental:

2. Merchandising Products Used in the Farm Business, Ohio State University, Columbus, Ohio 43210

QUESTIONS or ACTIVITIES:

1. a. Give five reasons why management must have records.
   b. Which of the five is most important? Why?
2. What does an "operating statement" show?
3. How does a "balance sheet" differ from an "operating statement"?
4. Where does management get the "figure" for the operating statement and balance sheet?
5. Why are cash registers balanced daily?
6. Why are "merchandise purchases" not the total cost of the merchandise sold?
7. What are two good reasons for having periodic records of "stocks and inventories"?
8. If the firm in the "statement of operations" had received $1000 less during this year for storage and handling (with all entries being the same), what would have been the gross margin?

UNIT: Business Procedures
TOPIC: Importance of Accurate Records
(Assignment Sheet continued)

9. Where, in the "statement of operations" do you think these items are included?
   a. Wages paid a Co-Op Vocational Agriculture student?
   b. The electricity bills?
   c. A radio "commercial" for the firm?
   d. The sacks for small items of merchandise?
   e. The decrease in value of a delivery pick-up?

10. In the "sample balance sheet" why is there no entry under "accumulated depreciation" for land?

11. If on December 30, 1965, this firm had paid an additional $5000 of its "accounts payable", how would these four numbers have been changed?
   a. Cash on hand and in bank?
   b. Total assets?
   c. Accounts payable?
   d. Total liabilities?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
IMPORTANCE OF ACCURATE RECORDS

Most people are familiar with the sales ticket and some of the other ordinary papers used in conducting business. These papers and procedures are so important in helping to make an operation successful that they need considerable attention.

To understand the importance of these items, an overview of the entire records of a business is necessary. Management of a business, to be successful, needs records of the business as a whole, and of each department, in order to:

1. Know the financial picture of the business at any given time.
2. Give proper information to board of directors, stockholders, and others involved.
3. Satisfy legal requirements.
4. Plan desirable changes in management and procedures.
5. Prepare state and federal tax returns.

One record needed by management is an "operating statement." It is sometimes called a "statement of operations" or a "profit and loss statement." These are prepared either annually, bienally, quaterly, or monthly, whichever is desired. The operating statement summarizes the receipts and expenses for a given period of time and shows the profit or loss for that period. Many businesses have this statement broken down by departments in order to ascertain the profit or loss of each department.

The other standard overall record used by businesses is the "balance sheet". The balance shows the financial condition of the business at a given time, but generally on the last day of the period covered by the operating statement. The balance sheet lists the assets, liabilities, and net worth of the business. The liabilities and net worth show the methods of obtaining capital for the business. The sum of the liabilities and net worth must "balance" with the assets of the business at any given time.

The balance sheet and the operating statement make up the financial report for a business.(Note attached sample forms.)

Importance of Accurate Records
(Information Sheet continued)

The daily, weekly and monthly records all help contribute to the final make-up of the "balance sheet" and "operating statement".

A record of "cash sales" for the period desired (day, week, month, or quarter) must be secured. In addition, the cash register must be balanced daily to be sure that all cash is accounted for and that all records are correct.

"Charge sales" must be correctly made and entered in appropriate ledgers, according to the policies of the particular business.

Records must be made of all "merchandise purchases, " including the cost of transportation and other incidental expenses.

Periodic records of "stocks and inventories" must be made, both for knowing the business' financial condition, and also for determining stock needs and sales.

In addition to those items directly concerned with sales, the costs of payroll, property expense taxes, supplies, services, advertising, interest, depreciation, losses and legal costs must be paid before any profit is returned to the business.

Importance of Accurate Records
(Information Sheet continued)

SAMPLE STATEMENT OF OPERATIONS FOR YEAR ENDED DECEMBER 31, 1965

SALES		$1,562,702.44
Less Cost of Commodities Sold		1,478,914.33
Gross Selling Margin		$ 83,788.41
OTHER REVENUE		
Grinding, Cleaning, etc.	$ 8,701.31	
Storage and Handling	10,893.03	
Dividends, Patronage Refunds, etc.	665.41	
Total		$ 20,259.75
GROSS MARGIN		$ 104,048.16
EXPENSES		
Salaries and Wages	$40,247.18	
Heat, Power and Water	4,597.79	
Plant Repairs and Maintenance	3,737.88	
Insurance	3,942.74	
Interest	31.70	
Telephone	728.43	
Taxes	7,417.40	
Advertising	1,787.00	
Depreciation	12,116.40	
All Other Expenses	3,710.15	
Total		$ 78,316.67
NET MARGIN		$ 25,731.49
DISTRIBUTION OF NET MARGIN		
Provision for Dividend on Capital Stock-- 4%	$ 2,272.00	
Patronage Refund to Stockholders-- 2 and 1 1/2%	21,680.17	
Provision for Federal Income Tax	254.64	
Balance of Net Margin Retained	1,524.68	
Total	$25,731.49	

Importance of Accurate Records
(Information Sheet continued)

SAMPLE BALANCE SHEET, DECEMBER 31, 1965
ASSETS

CURRENT ASSETS:			
Cash on hand and in bank		$ 28,173.70	
Accounts Receivable -- Patrons	$ 26,060.54		
Less: Allowance for Doubtful Accounts	2,302.20	23,758.34	
Accounts Receivable -- Grain Firms		3,787.41	
Inventories		42,016.76	
Prepaid Items		6,319.38	
Total Current Assets			$104,055.59
INVESTMENTS:			
Stock, Bonds, and Credits in Other Companies			$ 10,667.15

	Cost	Accumulated Depreciation	Net
PLANT AND EQUIPMENT:			
Land	$ 2,326.39	$	$ 2,326.39
Buildings	245,749.02	87,007.97	158,741.05
Machinery and Equipment	73,488.70	39,452.33	34,036.37
Furniture and Fixtures	4,538.78	3,921.09	617.69
Total	$326,102.89	$130,381.39	$195,721.50
Total Plant and Equipment -- Net			$195,721.50
TOTAL ASSETS			$310,444.24

LIABILITIES

CURRENT LIABILITIES:	
Accounts Payable -- Trade and Others	$ 15,649.42
Federal Income Tax Payable	254.64
Dividends Payable on Capital Stock	2,272.00
Patronage Refunds Payable for Year 1964	21,624.51

Importance of Accurate Records
(Information Sheet continued)

Employees' Taxes Withheld	$ 554.72	
Accrued Salaries, Property and Payroll Taxes	8,522.75	
Total Current Liabilities		$ 48,878.04
STOCKHOLDERS' EQUITY:		
Capital Stock Authorized, 750 shares Par Value $100.00, 641 1/2 Shares Issued Including 73 1/2 Shares of Treasury Stock Outstanding. 568 Shares	$ 56,800.00	
Additional Paid-In Capital	4,132.00	
Retained Earnings	200,634.20	
Total Stockholders' Equity		$261,566.20
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		$310,444.24

*****

Material for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education. 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Sales Tickets

OBJECTIVE: To develop an understanding of the necessity for completeness and accuracy in sales tickets and skill in their completion.

REFERENCES: Required:

Information Sheet, 920-III-2

QUESTIONS or ACTIVITIES:

1. Secure 10 sales tickets of the type or types used in the place of business in which you are employed.

   Attach the first to a sheet of paper, and letter each part of the ticket in a manner similar to the sample in Information Sheet, 920-III-2. Letter the parts in the order in which you would fill out the ticket. Then, on another sheet of paper, give the reason or the use for each part represented by a letter.

2. In making change, the salesman uses the ____________ denomination of bills and coins possible.

3. A numerical file accounts for ______ sales tickets.

4. A record of the customers' business is provided by by sales tickets in the ___________ file.

5. Completely make out 9 sales tickets with at least 5 items each without repeating the same item,

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-2

Information Sheet
on
SALES TICKETS

The heart of the accounting system is the billing of merchandise to customers. This is necessary to provide accurate records of transactions. Many businesses have triplicate sales tickets, one for the customer and two for the office files. Sales tickets need to be numbered consectively in advance for filing and checking purposes and to avoid loss of merchandise through carelessness. Sales tickets will provide the company with the following:

1. Information necessary to make an analysis of the day's business.
    a. Amount of cash taken in. This also serves as a check on the cash that should be in the cash register at the close of the day's business.
    b. The amount of merchandise sold
    c. The amount of sales tax collected
2. Information needed for the accounts receivable ledger for the customers who charged their purchases
3. A record of each transaction for future reference. After the information contained on the sales ticket has been recorded in the proper journals, the two copies should be filed as follows:
    a. One in a numerical file. Since all sales tickets are accounted for in this file, a sales person cannot accept cash from a customer, prepare a sales ticket, give the customer his copy, destroy the office copies and keep the money.
    b. One in a client file. This will serve as a record of the customers' business.

Many factors are important in the preparation of the sales ticket:

1. In spite of the importance of sales tickets, many mistakes are made in their use. Some common mistakes are as follows:

Sales Tickets
(Information Sheet continued)

(Use examples to show how important common mistakes are to the net profit of a business, e. g. , how much more is needed in sales to make up for an order for a ton of feed not filled.)

a. The ticket cannot be read

b. Some merchandise is not billed when sold

c. Price list and discount policies are not followed

d. Mistakes in arithmetic

e. Employees do not keep all of their sales tickets.

2. Although each business will have its own procedure for completing sales tickets, the following shows one procedure to follow in making out a sales ticket correctly: (A sample sales ticket is included.)

a. Enter the correct date.

b. Write the customer's correct name and address. If a partnership, it should be noted. The name and address becomes absolutely necessary if the purchase is charged.

c. Give a complete description of each article sold. Quantity and unit should be thought of as one item (for example, 100 lbs. of fertilizer or 10 gals. of insecticide).
The description should clearly designate the type of merchandise being sold, and not merely be a commodity classification. For example, 100# calf manna, not 100# feed. (On sales tickets, pounds are usually indicated by #.) This is necessary for checking price and for inventory controls. Show the price per unit for all merchandise. (Some sales tickets will have a column heading marked "price".) Bill all merchandise at the retail price. If the customer is entitled to a discount because of volume, damage, etc. , this amount is deducted from the retail price. Extensions must be mathematically accurate and legibly written.

d. Make a sub-total of the extension.

Sales Tickets
(Information Sheet continued)

e. Calculate the sales tax on all taxable items, and enter under the first total. (Sales tax policies will vary according to state laws.)

f. Next, calculate any delivery, mixing, grinding, or shelling charges, and enter under the sales tax calculations.

g. Add the extension column to obtain the grand total of charges for the sale.

h. Check the block on the ticket to indicate the method of payment (cash, check, charge, returned, account).

i. If settlement is to be made by a check larger than the ticket total, it is necessary to note both the amount of the check on the face of the sales ticket, and the change to be given. A similar calculation is recommended when a large bill is given in payment.

j. Get the signature of the person receiving the merchandise when the settlement is other than cash.

k. When a customer pays on account, make out a sales ticket and mark the items for which he is paying (for example, fertilizer, feed, balance on note, etc.).

l. In all cases where an employee ruins a ticket for any reason, the word "void" should be written across the front of the ticket, and the original placed with the other tickets. Sales tickets must be numbered consecutively. Each ticket must be accounted for at the end of the day's business.

m. The salesman initials the ticket in the appropriate block.

Properly prepared sales tickets giving full information about the transaction provide the manager with the information he needs in conducting the business. Sales tickets may prevent many misunderstandings with customers when a transaction is questioned.

Sales Tickets
(Information Sheet continued)

SAMPLE FARM SUPPLY COMPANY
Farmerton, Texas

January 14 19 64 — a

Sold To John Jones & Sons — b

Address Farmerton, Texas

	Quantity	Description	Price	Amount	
					c
c	200	100# Bags 32% Beefmaker	5.75	1150 00	
c		less 5% qty. discount		-57 50	c
				1092 50	d
	1000#	Grinding	.15	150 00	f
	1	Cornpopper	3.25	3 25	
		Sales Tax		10	e
				1245 85	g
i		Check $1250.00 Purch. 1245.85 Change $ 4.15			

☐ Eligible ☐ Ineligible

Patronage Volume

j Received By: John Jones

Salesman: Brown — m

Cash	Check	Charge	Returned	Account
	✓ h			

No. 47861

Sales Tickets
(Information Sheet continued)

Making change following a purchase can be done accurately by using the following procedure:

1. Count from the cost of the purchase to the total amount of payment. For example, if the cost is $2.98 and a $5 bill is tendered, count "$2.99, $3.00, $4.00, $5.00."
2. Use the largest denomination of coins and bills possible in making change.
3. Positively identify the amount (e.g. $5, $10, etc.) of a bill or check and lay it on top of the cash drawer until after the change is given in order to avoid mistakes.
4. If in doubt as to the correct change, or if payment is by check, the computation should be made with pencil and paper.
5. Use a flannel board and proportionately enlarged coins and bills to bring the class into a discussion and demonstration on the change-making process.

*****

Material for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Credit

OBJECTIVE: To develop an understanding of the need for and function of agricultural credit and the function of the agricultural business in supplying credit.

REFERENCES: Required:

1. Information Sheet, 920-III-3
2. How to Use Your Bank, L-389, Texas Agricultural Extension Service
3. Profitable Farm Management, Hamilton, J. E. W. R. Bryant, Prentice-Hall Inc., Englewood Cliffs, N. J., pp. 99-115, (State Adopted Text.)

QUESTIONS or ACTIVITIES:

1. Give 7 sources of credit for farmers.
2. What is the difference between "Productive Credit" and "Consumptive Credit"?
3. What does the business extending credit need to know about a credit customer? (The business firm is the "lender"; the customer, the "borrower".)
4. What are three advantages of the use of checks in paying bills?
5. Give 5 good rules in check writing.
6. Assume that a customer has requested that you write a check for his signature in the amount of his bill, $127.65. Obtain a blank check and write it out, leaving the signature space blank. Attach it to the sheet you are using to answer these questions.

UNIT: Business Procedures
TOPIC: Credit
(Assignment Sheet continued)

7. How does a draft differ from a check?

8. What is a "note"?

9. What is a "mortgage"?

10. If your firm has a written credit policy, secure a copy and attach it in your notes.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
CREDIT

The capital required to finance modern farming operations is so great that most farmers must either borrow money to pay for their purchases, or charge their purchases, making use of credit plans made available by businesses.

Credit is a very useful tool in conducting business. A vast majority of business done anywhere in the world proceeds with little transfer of actual cash. The retailer buys from the wholesaler or the distributor on credit just as the farmer buys on credit from the farm supply store.

Credit may be extended for only a short time (30 days or less, the same as cash) in which case the business establishment may do the financing. Credit may be extended for several months or longer, in which case a credit institution such as a bank or loan association will usually finance the purchase. Large amounts are secured by credit instruments such as commodity notes and mortgages.

Each business will establish credit policies. These policies will state the conditions under which credit will be extended, the maximum credit to be allowed, and the payment plans and penalties.

*****

Material for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-4

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Determining Selling Price

OBJECTIVE: To develop an understanding of the factors that enter into the determination of the selling price of merchandise.

REFERENCE: Required:

Information Sheet, 920-III-4

QUESTIONS or ACTIVITIES:

1. What must the selling price of an article include besides the original cost?

2. Which 5 of the "overhead" cost items listed in the information sheet will remain almost the same from year to year?

3. Which three of the overhead items will fluctuate most widely?

4. When overhead costs vary little or not at all, what are they called?

5. Why is an increase in volume of business usually advantageous to the firm?

6. What is "markup"?

7. A merchant buys an item delivered to his store for $10.00. He prices it at $13.00.
   a. What is the markup?
   b. What is the percent markup?

8. What is gross margin? How does it differ from markup?

9. An item costing $10.00 is marked up to $13.00 and sold. What is the gross margin?

UNIT: Business Procedures
TOPIC: Determining Selling Price
(Assignment Sheet continued)

10. Give a "rule of thumb" for determining a necessary gross margin.

11. What are feed "turn over" goals higher than hardware?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
DETERMINING SELLING PRICE

The original cost of merchandise is the actual purchase price, including the cost of transportation. The selling price must include the original cost plus merchandising costs, overhead costs, and a reasonable profit.

The overhead costs may reflect some, or all, of the following conditions:

1. Merchandise may become obsolete before sold.
2. Merchandise becomes shop-worn.
3. Some merchandise will be overstocked and will not sell.
4. The price of merchandise may drop before the stock is sold.
5. Interest on investment in inventory items.
6. Insurance on inventory items.
7. The cost of warehousing the merchandise
8. Delivery costs (to the customer)
9. Taxes on the merchandise carried in inventory
10. Theft of merchandise
11. Shrinkage of merchandise
12. Damage to merchandise in stock
13. Wages and salaries
14. Office and accounting expenses

Overhead costs may be grouped into areas of fixed costs (insurance, interest, taxes, etc.) which will be constant per $1,000 of inventory, and variable costs (raw materials, product containers, packaging materials, etc.) which change according to volume of business done, and the expenses of doing this business.

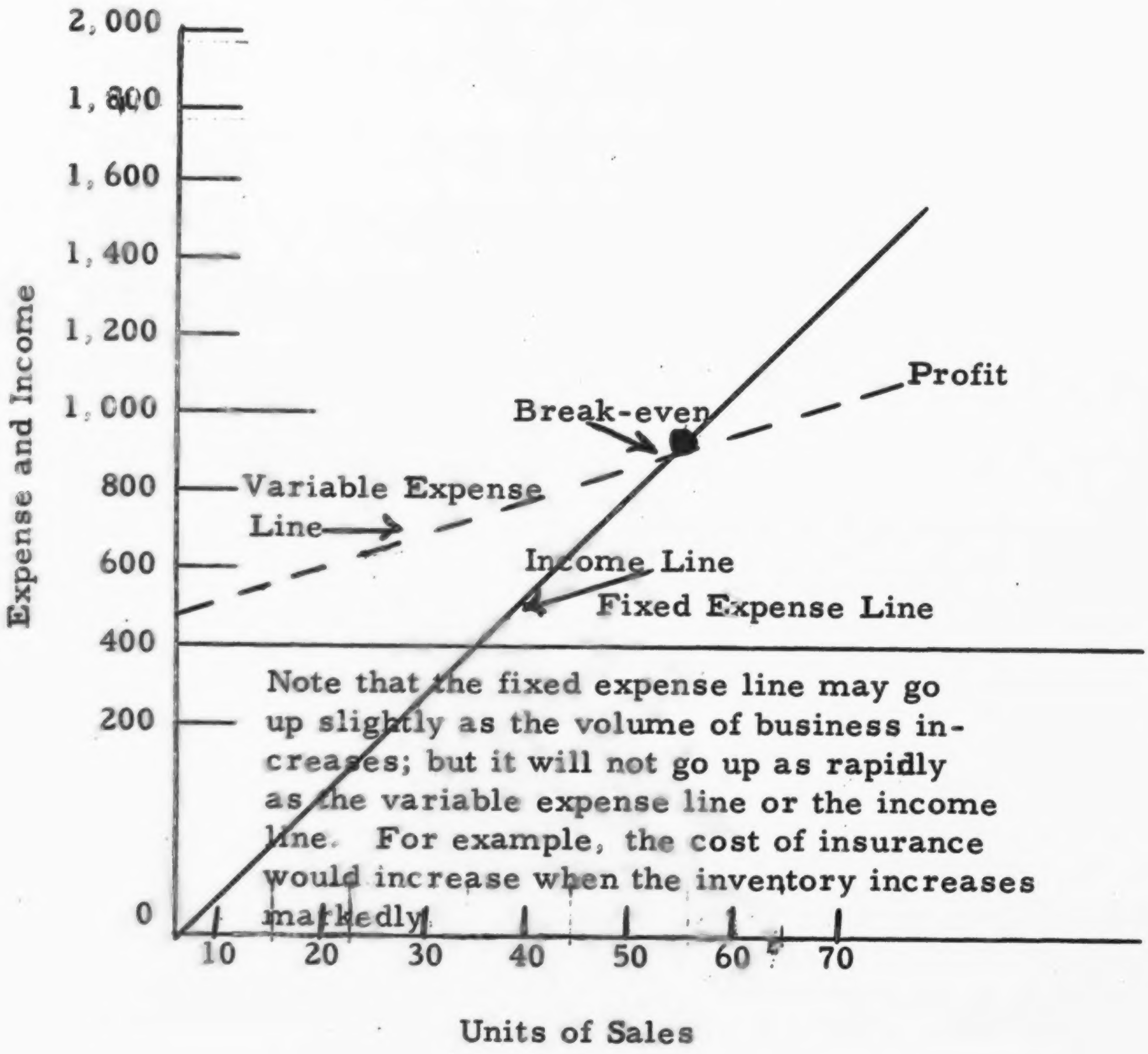
Determing Selling Price
(Information Sheet continued)

Some companies may find the annual cost of keeping items in stock as low as 10% of value while other companies may need an increase in cost of 15% or more in order to pay the expense of just keeping stock on hand.

In addition to overhead costs, some companies may provide free services to their customers. Services like mixing or spreading fertilizers will also increase the costs of doing business.

A graph may help explain the need for increasing the volume of business in order to cover both fixed and variable expenses and make a profit;

BREAK-EVEN CHART



Note that the fixed expense line may go up slightly as the volume of business increases; but it will not go up as rapidly as the variable expense line or the income line. For example, the cost of insurance would increase when the inventory increases markedly.

Determing Selling Price
(Information Sheet continued)

The merchant must determine a selling price for his products that is high enough to cover the cost of the item, overhead expenses, service costs, and allow a reasonable profit.

There are two terms used to describe the difference between the merchant's cost of an item and his selling price.

1. "Markup" - The amount added to the cost to make the selling price. As a percentage, it is the relation of the amount of markup to the cost. For example,

   Cost Markup Selling Price
   20 + 5 = $25
   The markup is 25% of the cost.

Example:		
	Merchant purchases vegetable dust	$1.00
	Merchant prices vegetable dust at	1.25
	Cash markup.	.25
	Percent markup.	

$$\frac{\text{Cash marukp}}{\text{Purchase price}} = \frac{.25}{1.25} = 25\%$$

2. "Gross margin" - Is determined by dividing the markup by the selling price.

Example:		
	Merchant purchases vegetable dust from wholesaler for.	$1.00
	Merchant prices vegetable dust at	1.25
	Cash markup.	.25
	Percent gross margin	

$$\frac{\text{Cash markup}}{\text{Selling price}} = \frac{.25}{1.25} = 20\%$$

Markup and gross margin are often confused. They are always the same in dollars and cents; but never the same in percentage because markup is figured on cost and margin on selling price.

Examples of the gross margins and markups used by one farm supply business to cover their expenses and to secure a reasonable profit is as follows:

Determing Selling Price
(Information Sheet continued)

	Percent Gross Margin	Percent Markup
Fertilizer	12.0 %	13.6%
Grain	6.0 %	6.4%
Hardware	33.3%	50.0%
Commercial Feed	18.0%	22.0%

A rule of thumb that may be used to determine gross margin is as follows: In order to make a large enough profit to remain in business, the number of times an item turns over in stock during the year times the gross margin should equal 100.

Example: Refer to the vegetable dust used in the illustration for markup and gross margin.

Vegetable dust turnover 5 times in stock during the year.

$$5 \times X \text{ (gross margin)} = 100$$
$$5X = 100$$
$$X = 20\% \text{ gross margin}$$

The suggested turnover goals for one business are as follows:

Feed. . . .	15
Fence . . .	4
Paint . . .	4
Hardware .	3
Machinery.	4
Seed	8-10
Oil & grease . .	4
Tires & tubes . .	4
Miscellaneous merchandise . .	4
Farm equipment . . .	3
Building material. . .	4
Electrical merchandise	4
Farm supplies, general	4

*****

Materials for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-5

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Business Records: Ordering and Receiving Merchandise

OBJECTIVE: To secure an understanding of business forms used in ordering and receiving merchandise.

REFERENCES: Required:

1. Information Sheet, 920-III-5

Supplemental:

1. Stockkeeping, Division of Extension, The University of Texas, Austin, Texas

QUESTIONS or ACTIVITIES:

1. Explain to the best of your knowledge who makes the decisions regarding what merchandise and how much to purchase in the business in which you work.
2. Secure a "purchase order" if one is available where you work and write up a sample order.
3. Why is it necessary to keep copies of purchase orders?
4. What is usually included in a "receiving record"?
5. Give two ways freight charges are handled.
6. What is a "bill of lading"?
7. What is an "invoice"?
8. How are invoices checked by business firms?
9. Explain the forms used for ordering and receiving goods in the business in which you work.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-5

Information Sheet
on
BUSINESS RECORDS: ORDERING AND RECEIVING MERCHANDISE

In purchasing and receiving merchandise in a business, the following are typical procedures and business forms used:

1. A decision is made on the type, amount, and cost of merchandise to be ordered, and the company from which it is to be ordered.

2. A purchase order is completed.

3. Company policy usually assigns the responsibility in ordering merchandise to specific employees. Duplicate records or purchase orders are kept in order to check them against the materials, the invoice, and bill of lading when merchandise is received. Note specifically on the sample purchase order the complete items, including the company's order number.

4. When the shipment is received, a "receiving record" or "receiving report" are typeical forms used to record the receipt of merchandise. Other similar records may be used.

5. The receiving record must be a complete record of the merchandise received, including its condition when received. The primary use of a receiving record is to check incoming merchandise against invoices and bills of lading.

6. Commercial carriers, such as railroads and trucking companies, will charge for hauling the products from the originating point to the delivery point. Prior to placing the order, an agreement should be made on who pays the delivery charges, the shipper or the receiver. Freight may be prepaid or sent C. O. D.

7. Forms used by the carriers are called "bills of lading" or "shipping records". An employee should know how to receive merchandise. He should understand the forms used.

8. The final business form to be considered in the ordering and receipt of merchandise is the "invoice". An invoice is a bill or statement due a company for merchandise delivered. Since

the payment for goods is made from the invoice, it must be accurate. The invoice should be checked against all previous papers--the purchase order, the receiving record, and the bill of lading. All businesses have an established policy as to the checking of invoices for payment. The discount terms must appear on the invoice and be used in computing the amount to be paid.

*****

Material for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT:	Business Procedures
TOPIC:	Inventories
OBJECTIVE:	To develop an understanding of principles and practices used in maintaining and utilizing inventories.

REFERENCES: Required:

1. Information Sheet, 920-III-6

Supplemental:

2. Stockkeeping, Division of Extension, University of Texas, Austin, Texas

QUESTIONS or ACTIVITIES:

1. What is an inventory?
2. Why are inventories necessary?
3. What is meant by "inventory control"?
4. What is a perpetual inventory?
5. When are "physical inventories" made?
6. In addition to counting the items, what purposes are met by a physical inventory?
7. What four items of additional information will most inventories secure?
8. If a form (or forms) is used for making inventories in the business in which you work, secure a form, study it and attach it with your answers.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
INVENTORIES

An inventory is a correct count of a concern's merchandise, including its value. An inventory is necessary for several reasons:

1. An accurate account of value is necessary for year-end or periodic analysis of the business.
2. Periodic merchandise counts enable the business to determine the freshness of its stocks, and to decide whether some items are obsolete.
3. Inventory counts will show the extent to which items are moving. They will show whether items are overstocked or understocked.
4. Physical count inventories are necessary to determine possible losses. (These are different than book inventories.)

Businesses will use inventories in additional ways. "Inventory control" is a system of keeping on hand adequate amounts of any given merchandise. A business needs to be sure that the customers' needs are met, but does not want to have surplus, outdated merchandise on hand which frequently may be in poor condition.

There are several types of inventories:

1. Perpetual inventories

   Many businesses have some or all of their stock listed so that they know at any given time the number of items of merchandise on hand. This is done by systematically adding the purchases to the inventory, and by subtracting the sales taken from the daily sales slips or totals which are then subtracted from these inventories. This results in maintaining a "book" inventory level as purchases and sales are made. To be sure it is correct, periodic physical counts must be made and checked against the perpetual inventory.

Inventories
(Information Sheet continued)

2. Physical inventory

The physical inventory is an actual count of all merchandise on hand at a given time. This must be done at the end of the fiscal year, and is of considerable value at other times during the year. Procedures in making the count will vary but will include many or all of the following procedures:

a. Arrange stock in an orderly fashion.

b. Check stock for condition; count only that which is salable.

c. Count and record every item, listing the cost price unless the particular business prefers that the selling price be used.

d. Keep inventories separate for different departments and types of goods.

e. Compute totals.

Businesses will have special forms used for taking the inventory. These forms may include:

1. Location of merchandise
2. Department to which merchandise is charged
3. Names of persons taking the inventory
4. Information concerning the age and/or quality of merchandise

*****

Materials for this Information Sheet was taken from: "Business Procedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
RECEIVING AND STORING MERCHANDISE

One of the important functions of any agricultural business is the receipt and storing of merchandise. To properly receive merchandise, whether it be feed, fertilizer, chemicals or miscellaneous merchandise, several steps must be followed:

1. A definite plan must be used in unloading, moving, and storing items. This involves consideration of who does the work, how various types of merchandise must be handled (by hand, fork lift, etc.), and how and where it is to be stored.

2. Damage or breakage must be determined as the unloading proceeds. Both damage and breakage must be noted on the receiving form. Damaged merchandise must be destroyed, returned, or kept and sold at a reduced price. The person in charge should determine, at the time of unloading, whether there is any shortage.

3. The possibility of shortage must always be checked by exact count or weight at the time of receiving the merchandise. The quantity of goods received must always agree with the goods signed for on the bill of lading, or other shipment record.

4. Policies vary on checking goods against the invoice to check against substitutions. Invoices may be with the goods or they may arrive before the goods. The person checking the shipment should be sure that the merchandise received is in accord with the purchase order before signing the delivery slip. Many businesses will use a duplicate copy of their purchase order to check against merchandise received.

5. The quality of the merchandise, insofar as it can be determined by visual examination or by approved testing procedures, should be checked at the time of arrival. Quality must be checked against what was ordered to be sure it meets the standards specified in the order.

6. The employee who receives the merchandise will usually sign for it. He will also complete a receiving report for his business. Note on the receiving report form the fact that accurate count, condition of merchandise, description of merchandise as well as other pertinent facts, are listed.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Receiving and Storing Merchandise

OBJECTIVE: To develop an understanding of the steps involved in receiving and storing merchandise.

REFERENCES: Required:

1. Information Sheet, 920-III-7

Supplemental:

2. Stockkeeping, The Division of Extension, The University of Texas, Austin, Texas

QUESTIONS or ACTIVITIES:

1. When should damage be noted when unloading merchandise upon its receipt?
2. How should damage be noted?
3. How are "shortages" checked?
4. When should the quality of merchandise be checked?
5. Secure one of the receiving forms used in the firm in which uou work and attach it to this assignment.

Agricultural Education
Teaching Materials Center
College Station , Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Stocking and Merchandise Planning

OBJECTIVE: To develop an understanding of the importance of and methods used in properly stocking and in merchandise planning.

REFERENCE: Required:

Information Sheet, 920-III-8

QUESTIONS or ACTIVITIES:

1. In your opinion, how should a merchant determine how much of a particular product to stock?
2. What are the penalties for a merchant ordering merchandise
   a. too early ?
   b. too late?
3. Who should call attention to low stocks in a firm?
4. Name three items in the store or place of business where you work that have slow "turnover".
5. Name three items in the store in which you work that have rapid "turnover".
6. What is the reason for the difference in Nos. 4 and 5 above?
7. Draw a diagram of the place of business in which you work, drawing in the location of classes of merchandise.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-8

Information Sheet
on
STOCKING AND MERCHANDISE PLANNING

Businesses have numerous decisions to make in determining the quantity of any certain item to order. The quality of stock and time to order are also important. Some factors which businesses must keep in mind in ordering supplies are:

1. Will this merchandise have a slow or fast turnover?
2. Will it keep if some remains unsold?
3. What will be the probable demand for this product this year or this season?
4. When will the deman come?
5. How long will it take to get replacement merchandise?
6. How much money may we have tied up in inventory stock?
7. Where can we secure quality merchandise at the lowest cost?

Although only certain employees will have the responsibility of ordering stock, all employees must be responsible for calling attention to low stocks and for keeping the stock neat and orderly.

An employee should know the exact location of merchandise. He should have a good working knowledge of the amount of a product on hand at a given time in relation to the probable demand.

*****

Material for this Information Sheet was taken from: "Business Prodedures", Module 6, Agricultural Supply, Sales and Service Occupations. The Center for Research and Leadership Development in Vocational and Technical Education, 980 Kennear Road, Columbus, Ohio 43212.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Regulations

TOPIC: Regulations in Formulating and Labeling of Feeds

OBJECTIVE: To develop an understanding of the regulations regarding formulating, labeling and subsequent use.

INTRODUCTION: Nearly all the states in the United States have adopted laws or rules and regulations in regard to formulating and labeling of feeds. These laws are not only of benefit to the stockman or poultryman, but also the the feed manufacturer that is conscientiously striving to be honest in placing a product on the market to adequately supply the needs of the person using them in his livestock or poultry feeding program. The laws, in general, require that a feed be licensed, the chemical composition, and feed ingredients be guaranteed.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, 8th edition, page 13.
2. Rules and Regulations adopted by the Texas Feed and Fertilizer Control Service, Bulletin MP-466, Texas A&M University, Texas Agricultural Experiment Station, College Station, Texas.
3. "Texas Commercial Feed Control Act of 1957", Bulletin MP-291, Texas A&M University, Texas Agricultural Experiment Station, College Station, Texas.

QUESTIONS or ACTIVITIES:

1. Name three things that feed laws generally require or enforce.
2. May color be added to feeds:
3. What is meant by "brand" of feed?
4. What is meant by "product" name?

UNIT: Regulations
TOPIC: Regulations in Formulating and Labeling of Feeds
(Assignment Sheet continued)

5. What amendment was passed in 1958 that greatly effected the feed business?

6. What information should be contained on labels for feed?

7. What are closed formula and open formula feeds?

8. Before a feed is registered that contains drugs, what are five things that are required.

9. Collect and study labels from the feeds sold by your employer. Place samle tags or labels in your notebook.

10. What organization controls formulating and labeling of feeds in Texas? Where is it located?

11. What four principal things about feeds are affected by federal regulations?

12. Name four things that medicated feed tag must contain, in addition to those on regular feed mixtures.

13. What fee is paid for inspection by the Texas Feed Control Service?

14. What is an adulterated feed?

15. What is misbranding?

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT:	Formulating Rations
TOPIC:	Factors to consider in formulating feeds
OBJECTIVE:	To develop an understanding of the various factors to consider when formulating feeds, regardless of the class of livestock.
INTRODUCTION:	Regardless of the animal involved, certain basic factors must be considered in formulating feeds. The goal in any case is a balanced ration which will supply all the basic nutrients of sufficient quality and in the proper amounts.

REFERENCES: Required:

1. Information Sheet, "Factors to Consider in Formulating Feeds."
2. Feeds and Feeding, Eighth edition, Abridged, pp. 148-150.
3. Stockman's Handbook, Third edition, pp. 71-72.

QUESTIONS or ACTIVITIES:

1. Why do animals on pasture need more total digestable nutrients than one that is in confinement most of the time?
2. Are protein rich feeds higher in cost than feeds low in protein?
3. Does palatability of a ration aid an animal to produce more? How?
4. From the stand point of profit, what is the most important factor in formulating feeds?

UNIT: Formulating Rations
TOPIC: Factors to consider in formulating feeds
(Assignment Sheet continued)

5. What is a balanced ration?
6. What two things will not substitute for figures in formulating feeds?
7. Name two examples of feed additives.
8. What enables ruminants to make proper use of roughages and low quality proteins ?

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-1

Information Sheet
on
FACTORS TO CONSIDER IN FORMULATING FEEDS

The factors to consider when formulating feeds are:

1. Protein - Protein is frequently the most limited nutrient in a ration. All essential amino acids must be supplied. Limiting nutrients can be compared to the amount of water in a stave barrel. The barrel will hold only the amount up to the shortest stave, regardless the length of other staves. Quality of protein becomes a limiting factor when less nutritious feeds are the total ration.

2. Cost - When formulating rations, the lowest cost protein feeds, to supply the need should be used. The mixture should still be palatable and contain adequate amounts of other nutrients.

3. Variety - Variety in the feeds used in a ration brings about a more palatable mixture, however it is not always the most economical.

4. Palatability - A balanced ration will not supply the nutrient requirement needs of an animal that does not eat the mixture. Quality of feed, storage, age and feeding methods are several factors that may alter palatability.

5. Fiber Content - Caution must be taken to insure that a ration is not too bulky or containing too much fiber. Young animals, swine and poultry must have less fiber, where horses or dairy animals and beef animals may take more fiber.

6. Mineral Content - Make sure animals are being fed the required minerals, or see that they are provided in a ration.

7. Vitamin Content - Rations, if properly balanced, generally contain adequate vitamin content however young animals, chicks or cattle on poor winter rations need their rations fortified with vitamin D or A.

Factors To Consider In Formulating Feeds
(Information Sheet continued)

8. Energy Content - Balanced rations normally contain enough carbohydrates and fats necessary, however special attention may be necessary for high producing cows as well as high producing laying hens. This is also true with horses used excessively on the range or track.

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT:	Formulating Rations
TOPIC:	Feeding Standards for Farm Animals
OBJECTIVE:	To develop an understanding of feeding standards and how they are used in livestock feeding
INTRODUCTION:	Feeding standards are tables stating the amounts of nutrients which, it is believed, should be provided in rations for farm animals of the various ages and classes in order to secure the best results. The standards must not be regarded as fixed rules but merely intended to enable a feeder to start with well balanced rations.

REFERENCES: Required:

1. Stockman's Handbook, Ensminger, 3rd Edition, pp. 54-55, 60, 62-65, 70.
    Beef - pages 54-55
    Sheep - page 60
    Swine - pages 62-65
    Horses - page 70
2. Feeds and Feeding, Morrison, 8th Edition, abridged, pp. 151-153, 577-582.

QUESTIONS or ACTIVITIES:

1. What is a feeding standard?
2. What things must be known before using a feeding standard?
3. Give the requirements using Feeds and Feeding, for a growing dairy heifer weighing 500 lbs. (Digestable Protein and Total Digestable Nutrients).
4. Give the requirements for feeding a 900 lbs. pregnant cow, through the winter.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-3

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Feed Analysis Tables

OBJECTIVE: To develop an understanding of the value and use of Feed Analysis Tables in livestock feeding.

INTRODUCTION: To enable the feeder to more nearly estimate the nutritional value of his feeds. Scientists have run tests on various feeds, determined the average composition, and arranged in chart form, the nutritional value of each. Charts of this nature usually give type of feed, dry matter, digestable protein, total digestable nutrients, and minerals for each feed.

REFERENCES: Required:

1. The Stockman's Handbook, Ensminger, 3rd edition, pp. 148-163, Table 2-29
2. Feeds and Feeding, Morrison, 8th edition, abridged, pp. 516-561, Table I-Appendix

QUESTIONS or ACTIVITIES:

1. What is a Feed Analysis Table?
2. What value is a Feed Analysis Table?
3. What information must you have to use a Feed Analysis Table?
4. What are the four main items on a Feed Analysis Table?
5. Give the digestable protein and dry matter percent for corn, dent, all analysis, grade no. 2 (Stockman's Handbook)

6. What is the amount of digestable protein and total digestable nutrients in Bermuda grass hay? (Feed and Feeding)
7. Give the dry matter in alfalfa hay, sun cured. (Using Stockman's Handbook)

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Common Methods of Balancing Rations

OBJECTIVE: To develop an understanding of the two common methods of balancing rations.

INTRODUCTION: After a person has an understanding of the feeding standards and feed analysis tables, and the factors to consider in formulating feeds, he must determine the best method of combining the proper kinds of feeds in the proper amounts to economically supply the needs of the animal.

There are two common methods used in balancing rations; the "Total Digestable Protein" method, and the "Square" method.

The remainder of this assignment will attempt to explain the two methods.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, 8th Edition, abridged, pp. 140-148.

2. Stockman's Handbook, Ensminger, 3rd Edition, pp. 72-82.

QUESTIONS or ACTIVITIES:

1. What are the two most common methods for balancing rations?

2. Give four advantages of the "Square" method.

3. Which one nutrient receives major attention by the "Square" method?

UNIT: Formulating Rations
TOPIC: Common Methods of Balancing Rations
(Assignment Sheet continued)

4. What two things must be available before balancing rations by either method?

5. Why does the "Total Digestable Nutrient" method more completely supply the needs of an animal?

6. What is the "Handy Feeding Recommendations"?

7. Develop a 15% protein ration of corn and cob meal and cottonseed meal for a 400 lb. baby beef.

8. Balance a ration for a 500 lb. dairy heifer requiring .81 - .92 lbs. of Digestable Protein and 6.9 - 8.1 lbs. of Total Digestable nutrients. Use the following feeds:
corn and cob meal
wheat bran
cotton seed meal

Heifer has free choice good grass hay.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Dairy Cows

OBJECTIVE: Develop an understanding of formulating rations for dairy cows.

INTRODUCTION: Profitable dairy production may be achieved by, first, selecting foundation stock with inherited ability to produce, and secondly, feeding and management of the herd in such a manner as to reach maximum production

It makes little difference how well an animal is bred if the cow is not given the proper kind and amounts of nutrients for manufacturing milk.

REFERENCES: Required:

1. Dairy Production, Diggins and Bundy, 2nd Edition, pp. 133-161.
2. Feeds and Feeding, Morrison, 8th Edition, abridged, pp 365-397.

QUESTIONS or ACTIVITIES:

1. Why is it important that the amount of concentrates for each cow be according to her actual yield of milk and butterfat?
2. Name ten (10) essentials in proper feeding and care of dairy cows.
3. Why is good pasture necessary for low cost milk production?
4. Why is it important that cows have a dry period?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Dairy Cows
(Assignment Sheet continued)

5. Why are roughages considered the basis for dairy cow rations?

6. What information is necessary to balance a dairy cows rations?

7. To maintain efficient production, a 1000 lb. cow giving 48 lbs. 4% milk will need:

    a. How many pounds of digestible protein?

    b. How many pounds of total digestible nutrients?

8. Show how you would determine the protein and total digestible nutrients for a 950 lb. dairy cow, producing 40 lbs. of 4.5% milk.

923-VI-6

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Dairy Heifers

OBJECTIVE: Develop an understanding of formulating rations for dairy heifers.

INTRODUCTION: It is essential to have a herd of high producing cows if a dairyman is to secure a good net income. The most certain method is to raise replacements of well bred, home raised, heifers with good productive capacity. In order to accomplish this, a dairyman should start with good strong healthy calves, and feed in such a manner as to maintain this and provide for maximum growth.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, eighth edition, abridged, pp. 398 - 410.
2. Dairy Production, Diggins and Bundy, second edition, pp. 163 - 177.

QUESTIONS or ACTIVITIES:

1. Name five (5) essentials in satisfactory rations for raising dairy calves.
2. What are the principal differences in the digestive system of young calves and older cattle?
3. What are 4 methods of feeding dairy calves after the first three days?
4. Why should a baby calf have colostrum?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Dairy Heifers
(Assignment Sheet continued)

5. At what age do young dairy calves usually start to eat grain and hay?

6. How can calves be encouraged to eat grain at an earlier age?

7. What is a milk replacer?

8. How much concentrates should a heifer have daily?

923-VI-7

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Breeding Beef Cows

OBJECTIVE: To develop an understanding of how good rations are formulated for breeding beef cows.

INTRODUCTION: Where beef cows are kept for the purpose of raising calves for beef, the cost of keeping them for the entire year must be charged against the calves at weaning time. It is therefore very essential that the breeding herd be maintained as cheaply and efficiently as possible. Although pasture is a vital key to economical beef production, it is vitally important that the pastures be supplemented with a sound feeding program for the breeding herd, so that good healthy well developed calves will be sold.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, eighth edition, abridged, pp. 411-433.
2. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 214-244.
3. Stockman's Handbook, Ensminger, third edition, page 53.

QUESTIONS or ACTIVITIES:

1. What three things are very important in feeding the breeding beef herd?
2. Why is it important that beef cows raising calves on pasture be fed well balanced rations?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Breeding Beef Cows
(Assignment Sheet continued)

3. Does excessive fattening of calves pay?

4. Can beef cows be wintered on roughage alone?

5. Is calf crop percentage affected by the rations being fed breeding beef cows?

6. What four things are necessary to know in considering the ration for beef cows?

7. What deficiences usually arise in winter feeding of beef cows.

8. Using Feeds and Feeding, Morrison, determine the nutrient requirements for a 900 pound pregnant cow, fed in the winter on average pasture.

923-VI-8

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Fattening Cattle

OBJECTIVE: To develop an understanding of formulating rations for fattening cattle.

INTRODUCTION: Cattle feeding demands a great amount of capital investment in both cattle and feed, and consequently much risk. Those who are thoroughly planning their feeding operation, and understand cattle feeding are the ones who will realize some profit. Mistakes in judgement can be expensive, therefore a thorough understanding of fattening cattle is of major importance to the feeder.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, eighth edition, pp. 426-433.
2. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 246-270.
3. The Stockman's Handbook, Ensminger, third edition, page 53, pp. 74-75.

QUESTIONS or ACTIVITIES:

1. What are the sources of profit from feeding fattening cattle?
2. What grains are commonly used in beef cattle rations?
3. Name the most common protein supplement for Texas.
4. What two roughages are most desirable for fattening cattle?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Fattening Cattle
(Assignment Sheet continued)

5. What are four advantages of pasture fattening?

6. Using Feeds and Feeding, determine the nutrient needs for fattening yearling cattle, 600 pounds in weight.

7. What is urea and what advantage does it have in a ration?

8. Of what advantage are hormones in a fattening ration?

9. What advantage is the addition of antibiotics in a fattening ration?

10. What is an all concentrate ration?

923-VI-9

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Breeding Ewes

OBJECTIVE: To develop an understanding of formulating rations for breeding ewes.

INTRODUCTION: Healthy productive flocks of good breeding ewes require special attention to the feeding and management program. The breeding flock will require different rations depending on whether they are bred, open, stage of pregnancy, or age of the suckling lamb. Shepherds who do not plan their feeding program according to the animals' particular needs will not be able to produce strong healthy lambs.

REFERENCES: Required:

1. Sheep Production, Diggins and Bundy, pp. 101-119.
2. Feeds and Feeding, Morrison, eighth edition, abridged, pp. 434-450.
3. The Stockman's Handbook, Ensminger, third edition, pp. 59-61.

QUESTIONS or ACTIVITIES:

1. What three things are sold in sheep production to make profit?
2. Why are sheep similar to cattle in their feeding habits?
3. Name five periods of the ewe's productive cycle and tell how they are related to feeding the ewes.

UNIT: Formulating Rations
TOPIC: Formulating Rations for Breeding Ewes
(Assignment Sheet continued)

4. How are sheep able to produce more salable products on less grain in proportion to forage, than any other common kinds of livestock?

5. Using Feeds and Feeding, abridged, eighth edition, determine the needs in digestable protein and total digestable nutrients for a 100 pound breeding ewe, nursing a lamb.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-10

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Fattening Lambs

OBJECTIVE: To develop an understanding of formulating rations for fattening lambs.

INTRODUCTION: Lamb production and feeding methods vary with various climatic, economic and feed conditions. Some areas are able to produce lambs on a good forage program and milk, some sold as feeders, and others sell lambs dropped in fall as hothouse lambs. Regardless of the method of production a person working with feeding lambs should have a thorough understanding of the problems involved in formulating good rations for lambs.

REFERENCES: Required:

1. Sheep Production, Bundy and Diggins, pp. 120-159.
2. Feeds and Feeding, Morrison, abridged, eighth edition,
3. The Stockman's Handbook, Ensminger, third edition, pp. 59-61.
4. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 491-506.

QUESTIONS or ACTIVITIES:

1. What three methods are commonly used in the production of fat lambs?
2. What is creep feeding of lambs?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Fattening Lambs
(Assignment Sheet continued)

3. How does the lamb feeder expect to make his profit?

4. Approximately how much concentrates and roughage will a lamb on full feed consume or eat daily?

5. What are the requirements for 50 pound fattening lamb.

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Brood Mares

OBJECTIVE: To develop an understanding in formulating rations for brood mares.

INTRODUCTION: Skill and good judgment in feeding enter into the success or failure in feeding horses, probably more than any other class of livestock. The variation in feeding of horses comes about in the different use for horses and also the small digestive tract of horses. The total digestable nutrient requirements for horses approximately double between a horse idle and a horse at work. This means the rations will consists more of grain for horses as the work increases. Thorough understanding of these various differences will help to maintain a well balanced ration for a horse.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, Abridged, eighth edition, pp. 451-465.

2. The Stockman's Handbook, Ensminger, third edition, pp. 69-71.

QUESTIONS or ACTIVITIES:

1. What nutrient is most likely to be deficient in a ration for a brood mare?

2. Should horses be allowed to eat all the hay they want?

3. Why are oats popular as a grain for horses?

4. How much grain and hay is the average allowance for a pregnant mare?

5. How is the "production" of horses different from other livestock?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Brood Mares
(Assignment Sheet continued)

6. Give the requirements for a brood mare, weighing 1000 lbs. nursing a foal.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-12

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Growing Colts

OBJECTIVE: To develop an understanding of formulating rations for growing colts.

INTRODUCTION: The colt should make about half of its growth during the first year. If should be fed liberally, so that its growth will not be slowed at any point of its development. A thorough understanding of the colt's feeding requirements, after it has received colostrum from the mare, is very important to its growth.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, eighth edition, pp. 463-464.
2. The Stockman's Handbook, Ensminger, third edition, pp. 70.

QUESTIONS or ACTIVITIES:

1. Why does a colt need to be fed liberally the first year?
2. Should a colt receive the colostrum from the mare?
3. What value is the colostrum to the colt?
4. Should a colt learn to eat grain early? Why?
5. What is a good feed mixture for colts?
6. Will reducing the feed to the mare and colt help control diarrhea?
7. What are the daily requirements for a 600 lb. growing colt after weaning?
8. How many pounds of concentrates should a colt be eating by the time they are weaned?

Agricultural Education
Teaching Materials Center
College Station, Texas

****

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-13

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT:	Formulating Rations
TOPIC:	Formulating Rations for Brood Sows
OBJECTIVE:	To develop an understanding in formulating rations for brood sows.
INTRODUCTION:	In order to produce a good number of thrifty pigs, the brood sow must have proper feeding and care. The profit or loss from a swine breeding herd is basically determined by the number of pigs weaned and marketed by the sow. Good breeding with poor feeding programs usually causes loss. The proper understanding of the needs of a brood sow during various cycles of production will assist in bringing about greater profits.

REFERENCES: Required:

1. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 84-97.
2. Feeds and Feeding, Morison, abridged, eighth edition, pp. 466-490.
3. The Stockman's Handbook, Ensminger, third edition, pp. 62-69.

QUESTIONS or ACTIVITIES:

1. How do swine differ from cattle sheep and horses in their nutritional needs?
2. Why do swine suffer from poor nutrition more than other livestock?
3. Name four periods in the cycle of production for a sow.
4. Name six essentials in the feeding and care of brood sows.

UNIT: Formulating Rations
TOPIC: Formulating Rations for Brood Sows
(Assignment Sheet continued)

5. Name two types of feeding brood sows.

6. What two things does the sow use her feed to accomplish?

7. Should a sow or gilt gain during pregnancy?

8. What is the advantage of hand feeding over self feeding the sows?

9. What percent protein should rations for sows contain?

10. Give the requirements for a 300 lb. sow nursing and a litter.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-14

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Growing and Fattening Pigs

OBJECTIVE: To develop an understanding of formulating rations for growing and fattening pigs.

INTRODUCTION: The primary aim of growing and fattening pigs is to produce rapid economic gains. To accomplish this, the rations for growing and fattening pigs must be adequate in protein. Also the rations must supply mineral and vitamin needs. Approximately one third of the cost of producing a 220 pound market hog is raising to weaning age, and the other two thirds is from weaning to market age. Since about twice the amount invested is in the latter period, it is very important to have an understanding of providing adequate and economical rations.

REFERENCES: Required:

1. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 120-145.

2. Feeds and Feeding, Morrison, abridged, eighth edition, pp. 466-490.

3. The Stockman's Handbook, Ensminger, third edition, pp. 62-68.

QUESTIONS or ACTIVITIES:

1. What are the two primary aims of growing and fattening pigs?

2. How much of the cost of producing a 220 pound hog is from weaning to market?

UNIT: Formulating Rations
TOPIC: Formulating Rations for Growing and Fattening Pigs
(Assignment Sheet continued)

3. Why are the use of complete rations in fattening swine becoming more popular?

4. Name two methods in feeding fattening pigs.

5. Do growing pigs require more protein vitamins and minerals than mature hogs?

6. What particular feed should make up the main part of a fattening ration?

7. What are the two most common systems of self feeding fattening pigs?

8. What percent protein does a fattening pig, 150 pounds up, need?

9. What is a good mixture to meet mineral needs of fattening pigs?

10. What are the feed requirements for a 100 lb. growing and fattening pig?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-15

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Feeds for Poultry

OBJECTIVE: To develop an understanding in formulating rations for poultry.

INTRODUCTION: The production of poultry in confinement, and the peculiar digestive system of poultry, creates problems for the poultryman in formulating rations for poultry. Poultry have very little ability to digest fiber, thus, their feeds must be concentrated in nature. A thorough understanding of these and other factors will enable a poultryman to more easily formulate rations for poultry that will be adequately balanced.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, eighth edition, pp. 491-512.
2. Profitable Poultry Production, Parnell, pp. 137-168.
3. Livestock and Poultry Production, Bundy and Diggins, second edition, pp. 570-612.

QUESTIONS or ACTIVITIES:

1. How does digestion of poultry differ from other farm animals?
2. What is an all mash ration for hens?
3. Why does careful consideration for minerals, vitamins, and protein become more important in poultry?
4. What group of feeds make up a major portion of poultry feeds?

UNIT: Formulating Rations
TOPIC: Formulating Feeds for Poultry
(Assignment Sheet continued)

5. Why are feeding standards for poultry usually expressed or stated in amounts of protein and other nutrients?

6. How are feeding standards for poultry stated?

7. Using the standard on page 493, Feeds and Feeding, abridged, eighth edition, determine the protein requirements for starting chicks and laying hens.

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Feed Preparation

TOPIC: Forms of Feeds

OBJECTIVE: To develop an understanding of the various forms of feed preparation and the benefits derived from each form.

INTRODUCTION: The problem of proper feed preparation or the proper form to feed is one of the most difficult problems for the feeder. It is very important that the feeder have reliable information on feed preparation in order to make maximum use of his feeds without extravagant investment in equipment.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, eighth edition, pp. 40-45.
2. The Stockman's Handbook, Ensminger, pp. 124-125.

QUESTIONS or ACTIVITIES:

1. What are seven forms of feed preparation?
2. What two factors determine the value of crushing, chopping or grinding feeds?
3. What is the chief advantage of pellet or cube feeds?
4. Does grinding and mixing make feeds more palatable?
5. Name five advantages to an all pellet ration.
6. What particular class of feeds are improved in digestibility by grinding?
7. Does grinding induce show animals to consume more feed?
8. Do older cattle with poor teeth benefit from grinding or chopping?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT:	Feed Preparation
TOPIC:	Forms of Feed for Various Classes of Livestock
OBJECTIVE:	To develop an understanding of the forms of feed preparation for vaious classes of livestock.
INTRODUCTION:	It is very desirable for a stockman or poultryman to know whether or not any specific kind of feed preparation will be profitable. The kind of livestock being fed will determine the value of grinding or crushing, along with the kind of feed. An understanding of the value of the various forms for different types of livestock and poultry essential.

REFERENCES: Required:

1. Feeds and Feeding, Morrison, abridged, eight edition. pp. 40-45.
2. The Stockman's Handbook, Ensminger, third edition, pp. 124-125.

QUESTIONS or ACTIVITIES:

1. What two classes of livestock may benefit from soaking or cooking feeds?
2. Do sheep need as much grinding of their feeds as other farm animals?
3. Why is finely ground or chopped feeds harmful to horses?
4. Do smaller animals need smaller pellets in pelleted feeds?
5. Why should hog feeds be ground instead of rolled?
6. Why is rolling of feeds better for horses than grinding?

UNIT: Feed Preparation
TOPIC: Forms of Feed for Various Classes of Livestock
(Assignment Sheet continued)

7. Why are rolled grains preferred over ground grains for show cattle?

8. Should calves under 9 to 12 months have their grain ground?

9. Does soaking improve the feeding value of a feed?

10. What class of feeds are now being pelleted that were fromerly not considered for pelleting?

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

Assignment Sheet
for
FEED SALES AND SERVICE

UNIT: Related Agricultural Supplies and Equipment

TOPIC: Miscellaneous Agricultural Supplies and Small Equipment

OBJECTIVES:

1. To develop an understanding of the wide range of related agricultural supplies and small equipment, which may be carried by an agricultural supply business.

2. To develop an understanding of the specific characteristics of related agricultural supplies and equipment which would be useful to the employee.

3. To develop an understanding of the services that might be provided pertaining to various agricultural supplies and equipment.

INTRODUCTION: The wide range of various types of agricultural supplies and equipment that are being stocked and sold by feed sales and service businesses, makes it imperative that any employee of such businesses realize and have a thorough understanding of these supplies and equipment. The particular types handled by the business will vary according to communities because of customer demand, local farming and ranching conditions and the opportunities for profit.

REFERENCES: Required:

1. Information Sheet, "Common Agricultural Supplies and Equipment found in Feed Sales and Service Business".

Supplemental:

2. Sales and service literature on the particular brands of the equipment and supplies being carried by the employer.

UNIT: Related Agricultural Supplies and Equipment
TOPIC: Miscellaneous Agricultural Supplies and Small Equipment
(Assignment Sheet continued)

3. Catalogues of agricultural supply companies..

QUESTIONS or ACTIVITIES:

1. Make a complete list of all agricultural supplies and equipment handled by your employer.

2. Make a scrapbook or file of literature concerning characteristics of all of the agricultural supplies and equipment sold by your employer.

3. Name the services that need to be provided for all existing lines of agricultural supplies and equipment.

4. Make a list of the different types of farming and ranching served by your employer.

5. Which supplies and equipment are most common in demand in your store?

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

Information Sheet
on
COMMON AGRICULTURAL SUPPLIES AND EQUIPMENT FOUND IN THE FEED SALES AND SUPPLY BUSINESS

1. Veterinary Supplies and Equipment
    a. Thermometers
    b. Veterinary Syringes
    c. Balling guns
    d. Hose syringes
    e. Trocars
    f. Mouth speculums
    g. Calf pullers
    h. Mastitis control and detection equipment
    i. Stockmen's knives
    j. Hardware disease magnets
    k. Castrating equipment and supplies
    l. Dehorning equipment and supplies
    m. Animal health products such as:
        1) Phenothiazine boluses
        2) Piperazine wormer
        3) Screw worm medicine
        4) Scour medicine
        5) Sulfa drugs
        6) Penicillin preparation
        7) Pinkeye treatments
        8) Udder ointments
        9) Milk fever remedies
        10) Blackleg bacteria
        11) Mange, lice and tick treatments
        12) Fly killers
        13) Bloodstop powder
        14) Bloat remedy
        15) Drenching kits

2. Large Animal Supplies and Equipment
    Among such items commonly sold in agricultural supply businesses are those listed below.
    a. Neck chains and tags
    b. Ear tags
    c. Tattoo markers
    d. Branding irons

Common Agricultural Supplies and Equipment
Found in the Feed Sales and Supply Business
(Information Sheet continued)

e. Cattle nose leads and neck straps
f. Leather and rope halters
g. Grooming supplies such as curry combs, brushes, soaps, polishes, coat dressings, and clippers
h. Horn weights and horn trainers
i. Hoof trimmers
j. Horsebridles and bits
k. Saddles and related tack
l. Horse shoeing supplies and equipment
m. Hog ringers
n. Feed carts
o. Calf weaners
p. Electric cow prods
q. Milking supplies and equipment
  1) Milk filters
  2) Milker inflations
  3) Cleaning supplies such as scouring sponges, toweling, brushes, and pipeline cleaners
  4) Pails
  5) Dairy scales
  6) Milk thermometers
r. Hobbles
s. Nose twitches
t. Creep feeders
u. Farrowing crates
v. Hog troughs

Some of the larger equipment sold through supply centers would be beyond the technical ability of the salesperson just entering the business. Examples of such items sold would be automated feeding and watering equipment, slatted floors, farrowing stalls, gutter cleaners, bulk tanks, and pipeline milker systems.

3. Poultry Supplies
The following are commonly sold over the counter in farm supply stores.
a. Egg candlers
b. Egg graders
c. Egg scales
d. Egg baskets
e. Egg washers and washing compounds
f. Chick hovers and brooders
g. Small incubators
h. Wing bands

Common Agricultural Supplies and Equipment
Found in the Feed Sales and Supply Business
(Information Sheet continued)

i. Electric debeakers
j. Poultry scales
k. Poultry waterers
l. Poultry feeders
m. Poultry nesting units

Larger equipment, which must be adapted to individual farm situations would probably be beyond the capacity of the retail salesperson without special training. Examples would include caged layer systems, fogging systems, and automated feeding systems.

4. Agricultural Hardware
   Some hardware items are primarily used on the farm, ranch, or horticultural operation and thus are found in many agricultural supply businesses. They include
   a. Fence stretchers
   b. Wire pliers
   c. Wire splicers
   d. Gate irons
   e. Mower repair blocks
   f. Portable air tanks
   g. Feed chopper and mowing machine knives
   h. Shear bars and mower guards
   i. Husking hooks and corn knives
   j. Grassboards
   k. Soil sampling augers and tubes
   l. Soil testing kits
   m. Seed cleaners and graders
   n. Hand sprayers, dusters, and their repair parts
   o. Grass, tree, and hedge shears or trimmers
   p. Pruning shears and lopping shears
   q. Pruning saws and pole pruners
   r. Lawn and garden rakes, hoes, and trowels
   s. Root feeders and waterers
   t. Budding, grafting, and pruning knives
   u. Brush hooks, mattocks and grab hoes
   v. Axes, sledges, and saw wedges
   w. Rain or sprinkler gauges
   x. Home pasteurizers
   y. Shallow and deep well pumps and replacement parts
   z. Butchering supplies such as hog scrapers, butcher's saws, meat pumps, and skinning knives
   aa. Irrigation siphons, sprinkler heads and sprinkler systems
   bb. Stock tank heaters

Common Agricultural Supplies and Equipment
Found in the Feed Sales and Supply Business
(Information Sheet continued)

cc. Animal traps
dd. Corn cribs and cribbing materials
ee. Farm levels and transits

5. Basic Hardware

Other hardware items often sold by agricultural supply centers are also found in the regular hardware store. The salesperson working in farm and garden supply centers will need to be able to sell these items. Among the more common items sold are the following:

a. Hand and power tools such as hammers. saws, electric drills, carpenters' squares, braces, levels and planes
b. Bolts, screws. nails. and builders' hardware
c. Glass
d. Screening
e. Smooth barbed, and woven wire field and poultry fencing
f. Electric fencing
g. Rope, chain. block and tackle
h. Tarpaulins and polyethylene sheeting
i. Wood preservatives
j. Wood and aluminum ladders
k. Replacement wheels
l. Plumbing supplies
m. Electrical supplies
n. Wood or metal paints, enamels, varnishes, lacquers. or primers
o. Roofing materials

6. Small Equipment

This term is generally used to describe small horsepower gasoline engine equipped, wheeled implements used in farm. lawn. and garden work such as garden tractors steam cleaners. rototillers, lawn mowers, brush cutters, power sprayers, and small centrifugal pumps. However, included in this category for sales purposes, are hand powered lawn mowers, seeders, fertilizer spreaders, wheel cultivators, and sprayers. Also included for sales purposes are small, power operated. hand tools such as hedge trimmers, sidewalk edgers, lawn sweepers, and chain saws. Stationery equipment sometimes included in the small equipment category are compost mills, power grinders, and air compressors.

The sales of small equipment in an agricultural supply or garden center are usually seasonal. A sizeable volume of sales is usually possible in such stores where the sales and service of small equipment is organized as a separate department stressing service and

Common Agricultural Supplies and Equipment
Found in the Feed Sales and Supply Business
(Information Sheet continued)

acceptance of "trade-ins" as standard policy. When grouped as a separate department, a specialized salesperson with a greater knowledge of capabilities and "product knowledge" is highly desirable. Such salespersons may be taken from other departments during a slack time if they have the "feel" for this type of work and can demonstrate competence as "talk about" merchandise being handled.

7. Tires, Batteries, Oils, and Accessories
The product knowledge needed for these items which are usually stocked in a farm supply center as well as made available through route salesmen is fully covered in Module No. 11 of this course on Petroleum and Petroleum Products, Sales and Service. The entire module need not be covered to train retail salespersons where such accessories are likely to be of secondary importance, but competencies IV, V, and VII are applicable. The subject matter of these competencies is arranged so that the minimum product knowledge needed by a retail salesperson is presented first under each heading.

8. Pet Supplies and Equipment
The large number of suburban residents who own pets of all kinds such as birds, rabbits, guinea pigs, tropical fish, cats, and dogs have created a market for many accessory items with sizeable "mark ups." Such items include feeds, cages, beds, blankets, grooming tools, deodorants, feeders, waterers, leashes, muzzles, and medicines for parasite control. Practically all garden centers handle pet supplies. An increasing number of farm supply stores also stock them. The salesperson working in centers handling such lines will need to have considerable product knowledge about these items if he is to be successful.

9. Outdoor Living Equipment
Increased interest in outdoor living both at home and in nearby park or recreation areas has caused many garden centers and farm supply centers to stock such items as lawn furniture, grills, patio paving blocks, swimming pools, outdoor lighting, insect repellants, swings, sand boxes, boats and outboard motors. Many stores feature these with garden displays in the spring and summer seasons. Special displays are often built and every effort is made to catch the "impulse" buyer. As with all seasonal merchandise, the profit to the store is high if the stocks are moved before the end of the usual buying period.

10. Others

*****

Common Agricultural Supplies and Equipment
Found in the Feed Sales and Supply Business
(Information Sheet continued)

Material for this Information Sheet was partially taken from Agricultural Supply - Sales and Service Occupations, Module No. 12, pp. 5-11, Ohio State University, Columbus, Ohio.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-1

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Introduction, Agricultural Salesmanship

1. a. Poor service rendered
   b. Discourteous treatment received
   c. Indifference on the part of the salesman
   (Personal experiences may be varied)

2. Need - may or may not be recognized by the customer. It is based upon reason.
   Desire - is a feeling of need. It may not be based upon reason.

3. a. The selling process
   b. The merchandise
   c. The firm
   d. Himself
   e. His relation to thecustomer
   f. The customer

4. a. Deals directly with the public
   b. Helps others make decisions
   c. Something "new" every day
   d. Succes is quickly recognized
   e. Enjoys high prestige

5. A satisfied customer

6. Everyone; the salesman, the firm, the customer and the public

7. a. Awakens human wants
   b. Satifies human wants

8. a. His need
   b. The price
   c. The product needed
   d. The source (firm or store)
   e. The time

9. The product that best fits his needs

10. a. Courtesy
    b. Sincere interest

11. Helping the customer to buy intelligently

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Meeting the Customer

1. The first contact gives the customer a lasting impression of the salesman and the business.

2. A well-groomed salesman a. attracts customers, b. inspires customer confidence.

3. Enthusiasm is difficult if the job is unpleasant.

4. a. Promptness
   b. Alertness
   c. Interest in the customer and his problems

5. The customer should be treated as a guest.

6. Exercise in recognition of personal characteristics

7. a. Participation in community activities
   b. Chamber of Commerce information
   c. A personal notebook on customers
   d. Comments made by others
   e. Past sales records
   f. Questions asked others
   g. Newspapers

8. Exercise in customer impressions. Depends upon the student's observations.

9. Exercise in product knowledge. Check for extent of knowledge.

10. Exercise in product knowledge, designed to make student aware of customer knowledge of product.

11. a. Good appearance
    b. Stock displayed attractively
    c. Knowledge of merchandise
    d. Knowledge of customer
    e. Knowledge of firms advertising
    f. Selling sentences
    g. Knowledge of competitor's product
    h. Possible customer objections and methods of meeting them

UNIT: Agricultural Salesmanship
TOPIC: Meeting the Customer
(Answer Sheet continued)

12. a. Discussions with other employees
    b. Stock duties
    c. Timidity in approaching customers
    d. Indifference to customer needs

13. a. By taking the time to let the customer express the problem
    b. By asking questions to determine if the customer understands the problem
    c. By suggesting a procedure that will assist with the problem

14. Examples of
    a. Conventional - "May I help you, Mr. Jones(or sir)?"
    b. Question - "Is this cold weather affecting your milk production, Mr. Brown?"
    c. Stating a fact about merchandise - "We've surely been selling a lot of that feed, Mr. Smith."

15. Courteous
    Short
    Requires no decision
    Affirmative
    Emphasizes the desire to serve

16. a. Comfort
    b. Pleasure
    c. Appetite
    d. Possession
    e. Fear
    f. Devotion
    g. Curiosity
    h. Ornamentation
    i. Construction
    j. Imitation
    k. Loyalty

17. a. Professional feeling toward selling
    b. Courtesy
    c. Enthusiasm
    d. Interest in the customer and his problems
    e. Willingness to develop self-confidence
    f. Integrity
    g. Desire to be of service
    h. Appreciation of psychology

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Presenting Supplies and Services to Customers

1. a. Attention c. Desire
   b. Interest d. Action

2. Attention may be involuntary. Interest is a voluntary reaction.

3. A combination of the needs or wants of the customer with the merits of the merchandise.

4. a. Desire for increased yields
   b. Desire for more profits
   c. Desire for less difficult work
   Others acceptable

5. a. Newspaper advertising
   b. TV or radio advertising
   c. Talk with a neighbor
   d. Direct mail circulars
   Others acceptable

6. Student activity. He should include: a. Attention step
   b. Interest step
   c. Desire step

7. a. Know the features of the product.
   b. Be able to answer questions about the product.
   c. Be able to demonstrate the product, including its advantages

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Overcoming Customer Resistance

1. The seller and the buyer must "give up" something to secure something. The seller "gives up" merchandise; the buyer, money. Eash sale represents a choice.

2. The customer's a. pleasure, b. satisfaction, and/or c. need

3. a. Need - Stress usefulness of a product
   b. Quality - Point out good features
   c. Source - Name satisfied customers; provide company information or reliability
   d. Price - Revealing values of product
   e. Time - Show positive interest; counter all objectives
   f. Thing - Showing suitability of the product

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-I-5

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Closing the Sale

1. When the need for the merchandise has been definitely established

2. That of helping the customer make a wise decision

3. When the customer is not aware of his needs or not well aware of product choices

4. Immediately after the customer decides to buy

5. a. The customer has exhibited attention, interest, and desire for the product.
   b. The relationship between the need and the product has been established.
   c. Objections have been overcome.
   d. The price is acceptable.
   e. The product is approved by the customer.
   f. The customer has the "power" (ability) to make the purchase.

6. Giving the customer a small decision to make, based upon the major decision to buy. Example: "Do you prefer the red or the green?", "Would you prefer sacks or paper bags?"

7. a. Assuming failure in the beginning
   b. Hurrying the customer
   c. Failing to help the customer decide
   d. Failing to overcome obstacles
   e. Stressing the wrong selling points
   f. Trying to force the customer
   g. Discourtesy at any point

8. a. Write legibly.
   b. Accuracy
   c. Name and address completed
   d. Special directions noted

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Agricultural Salesmanship

TOPIC: Fundamentals for Successful Selling

1. a. A wholesome attitude
    b. People
    c. Merchandise
    d. Good selling methods

2. Student activity, written

3. Student activity, written

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-1

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Importance of Accurate Records

1. a. (1) To know the financial status of the business
   (2) To give proper information to company officers and stockholders
   (3) To satisfy legal requirements
   (4) To plan for desirable change in management and procedures
   (5) To prepare tax returns
   b. To plan for desirable change in the business

2. Profit or loss for a stated period of time

3. A balance sheet shows all assets and liabilities. The two always are equal.

4. All daily records of the firm, including sales tickets, invoices of purchases, and other records

5. To be sure that this part of the firm's records are correct for the day

6. Because transportation and many other items of expense are involved in the true "cost" of the merchandise to the firm.

7. a. To assist in determining the firm's financial condition
   b. To plan for purchases of stock

8. $103,048.16

9. a. Salaries and wages c. Advertising
   b. Heat, power, and water e. Depreciation d. All other expenses

10. Because the land did not become less valuable.

11. a. $23,173.70 b. $305,444.24 c. $10,649.42 d. $305,444.24

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
IMPORTANCE OF ACCURATE RECORDS

1. Receipts Expenses Profit Loss

2. Financial condition

3. Planning purchases

4. Assets
   Liabilities

5. a. Asset
   b. Liability
   c. Asset
   d. Asset
   e. Liability

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Sales Tickets

1. Activity

2. Largest

3. All

4. Client

5. Activity

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
SALES TICKETS

	T	F
1.	✓	
2.		✓
3.		✓
4.	✓	
5.		✓

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-3

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Credit

1.
   - a. Merchants or dealers
   - b. Individuals
   - c. Commercial banks
   - d. Insurance companies
   - e. Production credit associations
   - f. Federal Land Banks

2. Productive credit is used to make more money. Consumptive credit is used in a manner that is not designed to produce extra income.

3.
   - a. The moral responsibility of the customer
   - b. History of debt
   - c. The financial status of the customer (his repayment capacity)

4.
   - a. Large amounts of cash are unnecessary.
   - b. A cancelled check serves as a receipt.
   - c. Risk of theft is small.

5.
   - a. Write plainly, in ink.
   - b. Completely fill in the space for the amount of the check that is written.
   - c. Numbers following the "dollar sign" should be placed as close as possible.
   - d. Never erase on a check.
   - e. The purpose should be placed on the check.

6. (Activity) (Examine check for proper execution)

7. The amount shown is paid by a third party, previously arranged and shown on the draft.

8. A written promise to pay a specific amount at a specific future date.

9. A written claim against propery, guaranteeing the payment of a debt.

10. (Activity)

Agricultural Education
Teaching Materials Center
CollegeStation, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
CREDIT

True	False	
✓		1.
	✓	2.
✓		3.
	✓	4.
✓		5.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-4

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Determining Selling Price

1. a. Merchandising costs b. Overhead c. Profit

2. a. Interest on investment b. Insurance c. Warehousing d. Taxes e. Office and accounting expenses

3. a. Drop in price b. Theft c. Damage

4. Fixed costs

5. Fixed expenses will increase little with increased volume; variable costs will increase more, but opportunities for total profits become greater.

6. The amount that is added to the cost to arrive at the selling price

7. a. $3.00 b. 30% (3.00 ÷ 10.00 = 30%)

8. The gross margin is obtained by dividing the markup by the selling price (not the cost).

9. $3.00 ÷ $13.00 - 23 ¼%

10. Number of times an item "turns over" per year times gross margin should equal 100.

11. Feed is consumed, requiring more frequent purchase.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
DETERMINING SELLING PRICE

__a__ 1.

__d__ 2.

__c__ 3.

__a__ 4.

__a__ 5.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Business Records: Ordering and Receiving Merchandise

1. Activity

2. Activity

3. To check against invoice, bills of lading and goods delivered

4. a. Merchandise received
   b. Condition of merchandise

5. a. The shipper "prepays" the freight.
   b. Goods arrive "C. O. D.", with the merchant paying the freight upon delivery.

6. A form used by the carrier (railway, etc.) enumerating items being shipped

7. A statement (bill) due a company for merchandise delivered

8. Invoices are checked for accuracy and compared to purchase orders, receiving records and bills of lading.

9. Activity

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-5

Answer Sheet for Test
on
BUSINESS RECORDS:
ORDERING AND RECEIVING MERCHANDISE

__b__ 1.

__c__ 2.

__a__ 3.

__c__ 4.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Inventories

1. An accurate listing of the firm's merchandise on hand with its value

2. a. For periodic analysis of the business
   b. To determine age of stock on hand
   c. To indicate volume of business by items
   d. For location of losses

3. A system for making sure that adequate, but not excessive amounts of merchandise is on hand

4. An inventory kept up-to-date constantly by addition of purchases and deletion of sales

5. At the end of the firm's fiscal year and often at other times

6. a. Arranging stock
   b. Checking condition of stock
   c. Separation into departments or categories
   d. Listing values of the stock

7. a. Location of the merchandise
   b. Department to which merchandise is charged
   c. Names of persons preparing the inventory
   d. Information on age and quality of the merchandise

8. (Activity)

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
INVENTORIES

True	False	
✓		1.
	✓	2.
✓		3.
✓		4.
✓		5.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Receiving and Storing Merchandise

1. As unloading proceeds

2. On the receiving form and in other ways used by the firm

3. By exact count or by weight

4. As soon as possible after its arrival

5. Activity

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-7

Answer Sheet for Test
on
RECEIVING AND STORING MERCHANDISE

__b__ 1.

__c__ 2.

__a__ 3.

__c__ 4.

__b__ 5.

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
AGRICULTURAL SALES AND SERVICE

UNIT: Business Procedures

TOPIC: Stocking and Merchandise Planning

1. (Opinion question) May include past experience; weather conditions affecting farmer needs, etc.
2. a. Capital utilized unproductively; store or warehouse space tied up.
   b. Loss of sales; undesirable customer relations.
3. Any employee
4. Activity
5. Activity
6. Activity-thought question
7. Activity

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test on STOCKING AND MERCHANDISE PLANNING

1. Capital (shelf space: o.k.)

2. Business

3. Every employee

4. Every employee

5. Old

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Regulations

TOPIC: Regulations in Formulating and Labeling of Feeds

1. a. Feeds be licensed
   b. Chemical composition
   c. Feed ingredients guaranteed

2. Yes, only if it is harmless to animals and does not conceal inferiority.

3. "Brand" is a sales or business trade name.

4. "Product" denotes type of feed, such as "dairy feed."

5. Feed additives amendment (Delaney clause)

6. a. Net weight
   b. Brand or trade
   c. Product name
   d. Purpose of medication
   e. Active drug ingredients, by common names; expressed in percent or grams
   f. Guaranteed analysis of feed
   g. Feed ingredients, by common names
   h. Name and address of manufacturer
   i. Detailed feeding directions:
      (1) Purpose
      (2) When to feed
      (3) How to feed
      (4) Precautions
      (5) Warning statement

7. "Closed formula" means listing only ingredients. "Open formula" means listing ingredients and percent of each.

8. a. Show thename of and purpose for the presence of the drug.
   b. Furnish data in support of the claims to demonstrate the efficiency of the product.
   c. Show the minimum and maximum quantity required to accomplish the purpose.

UNIT: **Regulations**
TOPIC: **Regulations in Formulating and Labeling of Feeds**
(Answer Sheet continued)

d. Show the safety of the feed when used according to directions.
e. Furnish a written statement that given adequate written or printed warnings and feeding directions which would accompany delivery of feed.

9. (Student activity)

10. Texas Feed and Fertilizer Control Service, Texas A&M University, College Station, Texas

11. 1. Additives that can be added to feeds
    2. Level of additives
    3. How medicated feed is to be fed
    4. Proper labeling of medicated feeds

12. a. Purpose of medication
    b. Directions for use of the feed
    c. Common names and amounts of all active drug ingredients
    d. Warning statement of a withdrawal period, when required, for a particular drug in a feed

13. 10¢ per ton of feed

14. a. When its composition, quantity, or quality falls below or differs from that which is reported or represented by the label.
    b. When it is moldy, sour, heated, or otherwise damaged whereby it is rendered injurious to animals.
    c. When an ingredient has been whole or in part omitted or extracted therefrom.
    d. When any ingredient has been in whole or in part substituted.
    e. When any substance has been added thereto or mixed or packed therewith so as to deceptively increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is.
    f. When damage or inferiority has been concealed in any manner.
    g. When it bears or contains any poisonous or deliterious substance which may render it injurious to animals under ordinary conditions
    h. When it contains any low grade material, unless the name and percentage of such material are cleanly and prominently printed on the label and labeling thereof.
    i. When it consists in whole or in part of an diseased, filthy, putrial, or decomposed substance, unless such substance has been rendered harmless by sterilization or other effective processes.
    j. When it is otherwise unfit for feeding to animals.

UNIT: Regulations
TOPIC: Regulations in Formulating and Labeling of Feeds
(Answer Sheet continued)

15. a. A commercial feed does not bear a tag (certificate) as required.
    b. When its container does not bear the labeling required.
    c. When labeling is false.
    d. When container is so made, formed or filled as to be misleading.
    e. When it purports to be or is represented as a commercial feed for which a definition of identity and a minimum standard have been prescribed by regulation, unless it conforms to such definitions and standards.
    f. When it is not subject to the provisions of the Section 9(e) of the Act.
    g. When any medicines, drugs or any of the other items named in Section 5(a) (4) of the Act are incorporated in the feed and the quantity of such items and warning statements and directions for use are not shown on label as required.

3

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Factors to Consider in Formulating Feeds

1. Because of additional energy used up in muscular work of grazing

2. Protein rich feeds are usually higher in cost.

3. Yes, feeds must be palatable to the animal or they will not eas as much, therefore cutting down on production.

4. Cost of the ration

5. A ration which provides an animal the proper proportions and amounts of all the required nutrients for a period of 24 hours

6. a. Experience
   b. Born livestock intuition or "know how"

7. Antibiotics, Hormones

8. Bacteria

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FACTORS TO CONSIDER IN FORMULATING FEEDS

1. F
2. T
3. T
4. T
5. F
6. F
7. T
8. F
9. T
10. T

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Feeding Standards for Farm Animals

1. Tables stating amounts of nutrients which, it is believed, should be provided in rations for farm animals of various ages and classes in order to get best results.

2. The type of animal, size or weight, use of animal, and conditions under which it is fed.

3. 500 lb. Heifer -- Digestable protein -- .81-.82
Total digestable nutrients -- 6.9-8.1

4. 900 lb. Pregnant Cow - Wintering -- Digestable protein -- .65-.70
Total digestable protein -- 6.9-9.7

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR BROOD MARES

1. T
2. T
3. F
4. T
5. T

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Feed Analysis Tables

1. A table or chart worked out by scientists, showing average compositions of feeds

2. To enable the feeder to more nearly estimate the nutritional value of his feeds

3. Types of feed
   Quality of feed

4. Type of feed
   Percent dry matter
   Digestable protein
   Total digestable nutrients
   Minerals

5. Corn, dent, all analysis, grade 2 = Digestable Protein - 7.2%
   Dry matter percent - 88%

6. Bermuda grass hay = Digestable Protein - 3.7%
   Total digestable nutrients - 44.2%

7. Alfalfa hay, sun cured = Dry matter - 88%

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FEED ANALYSIS TABLES

a. Type of feeds
b. Dry matter
c. Digestable protein
d. Total digestable nutrients
e. Minerals

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Common Methods in Balancing Rations

1. a. "Square" method or Pearson Square
   b. "Total Digestable Nutrient" method

2. a. Simple
   b. Direct
   c. Easy
   d. Permits quick substitution of feed ingredients

3. Protein

4. a. Feed standards b. Feed Analysis Tables

5. Because it considers more than protein alone, such as dry matter, total digestable nutrients and protein.

6. General daily recommendations for various description of animals as to forage per day and concentrates per day, based on types of animals under various feeding conditions.

7. Corn and cob meal - 5.9 digestable protein
   Cottonseed meal (exp) - 33.1 digestable protein

   Cottonseed meal 33.1 9.1 parts of cottonseed meal
   Corn and cob meal 5.9 18.1 parts of corn and cob meal
   Total 27.2 parts

   18.1 ÷ 27.2 = 66.5 lbs. corn and cob meal in 100 lbs. of mixture for 15% protein

   9.1 ÷ 27.2 = 33.5 lbs. of cottonseed meal in 100 lbs. for 15% protein

   Feed 12 5o 15 lbs. per day for a 400-500 lb. fattening calf.

UNIT: Formulating Rations
TOPIC: Common Methods in Balancing Rations
(Answer Sheet continued)

8. Ration for 500 lb. dairy heifer

Requirements:	Digestable Protein	Total Digestable Nutrients
	.81 - .92	6.9 - 8.1
Corn and cob meal	5.4	73.2
Wheat bran	13.2	66.9
Cottonseed meal	32.2	69.1
Bermuda hay	3.6	44.2

Feeds and Feeding recommends 2-4lbs. of concentrates daily. Hay is fed free choice.

Feed	lbs. Fed		T.D.N.
Corn and Cob meal	4	.216	2.93
Wheat bran	2-1/2	.333	1.70
Cottonseed meal	1/2	.161	.346
Bermuda hay	5	.160	2.310
		.870	7.286

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-4

Answer Sheet for Test
on
COMMON METHODS IN BALANCING RATIONS

1. a. "Square" method
   b. "Total Digestable Nutrients" method

2. Feeding
   Feed Analysis

3. Protein

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-5

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Dairy Cows

1. So that each cow can maintain a high level of production, based on her needs in size as well as production

2. a. Economical well-balanced rations
   b. Comfortable surroundings for all seasons
   c. Palatable rations, with plenty of good roughage and variety of feeds
   d. Adjust concentrates for each cow's actual production
   e. Kindness by the herdsman
   f. Regularity in feed and care
   g. Dry periods of proper length
   h. Plenty of good fresh water
   i. Rations slightly laxative
   j. Some succulent feeds in ration

3. Good pastures are necessary because a cow can keep up her production on less concentrates, making for more economical production.

4. Dry periods are important for a cow so they can rest from production, and will actually produce more than when milked continuously.

5. Without plenty of good quality roughage, it is difficult to obtain economical milk production, and dairy cows are efficient users of roughage in large amounts.

6. a. Weight b. Daily milk production c. Butterfat percent

7. Digestable protein - 2,748 lbs. Total digestable - 22.89 lbs.

8. If we have a 950 lb. cow, producing 40 lbs. of 4.5% milk, she will need .6 lb. of protein and 6.65 lbs. of total digestalbe nutrients per day for maintenance. In addition, she needs .05 lb. of protein and 136 lbs. of total digestable nutrients for each lb. of milk produced daily. Example:

	Digestable Protein	Total Digestable Nutrients
Maintenance	.6	6.65
Milk Production -(40x.05)	2.0	14.40
Total requirements	2.6	21.05

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR DAIRY COWS

1. Efficient

2. Pastures

3. Roughage

4. Weight
   Daily milk production
   Butterfat percent

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Dairy Heifers

1. a. Plenty of protein
   b. Protein of good quality
   c. Enough total digestable nutrients to permit normal growth
   d. Sufficient minerals, especially calcium, phosphorous and salt
   e. Liberal amounts of vitamins

2. The rumen, or larger part of stomach, does not begin to develop and function for several days and therefore is not able to manufacture some nutrients which older cattle are able to manufacture.

3. a. Liberal milk feeding
   b. Using milk replacers
   c. Limited milk plus a calf starter
   d. Nurse cow

4. Because it is nature's formula for starting the young calf. If it is rich in vitamins, protein, and minerals and contains these feeds in proper amount to meet the needs of the calf

5. Approximately ten days

6. By rubbing some starter or dry feeds on its nose and mouth after each milk feeding

7. Dry feed mixture that can be changed to a liquid with the addition of water, and fed as a replacement for milk

8. 4 to 6 lbs. daily

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR DAIRY HEIFERS

1. T
2. F
3. F
4. T
5. T
6. F
7. T
8. T
9. T
10. T

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Breeding Beef Cows

1. a. Feeding efficiency
   b. Calf crop percentage
   c. Vigor and size of calf at market time

2. To maintain healthy breeding herd and produce calves higher in weaning weights, and more health and vigor. Calves are marketed younger now, therefore much of the early development is through the breeding cows nutritional program.

3. No, excessive fattening is expensive and the producer is not paid any extra for the excess.

4. Yes, when a good quality legume hay is the source.

5. Yes

6. a. Size of cow c. Condition of cow
   b. Feeds being fed d. Conditions of feeding

7. Vitamins and minerals

8. Digestable protein -- .65-.70 lb.
   Total digestable nutrients -- 6.9-9.7 lb.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR BREEDING BEEF COWS

1. Cheaply

2. Pasture

3. Marketed

4. Excessive

5. a. Health and vigor of calves at market
   b. Calf crop percentage
   c. Feeding efficiency

6. Vitamins
   Minerals

7. Percentage

8. Roughage
   Legume

Agricultural Education
Teaching Materials Center
College Station, Texas

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-8

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Fattening Cattle

1. a. Margin or higher price per lb.
   b. Gain
   c. Manure value

2. Corn Oats Grains sorghums

3. Cottonseed meal

4. Legume or grass and legume mixture

5. a. Gains are cheaper.
   b. Less labor required
   c. Manure well distributed
   d. No shelter or special equipment required

	Per head lbs. daily
6. Digestable protein	1.18-1.32
Total digestable nutrients	10.7-12.3

7. Urea is a synthetic nitrogen compound, that cattle can convert to protein. It is used to make rations cheaper.

8. Hormones are materials secreted by glands in animals body that affects growth and development and fattening. It can be produced synthetically or artificially.

9. Antibiotics cuts down on internal infections; thus allowing greater gains at cheaper cost.

10. A low roughage, high energy ration.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-8

Answer Sheet for Test
on
FORMULATING RATIONS FOR FATTENING CATTLE

1. F
2. T
3. F
4. F
5. F
6. T
7. F
8. T
9. F
10. T

Agricultural Education
Teaching Materials Center
College Station, Texas

Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT. Formulating Rations

TOPIC: Formulating Rations for Breeding Ewes

1. a. Lambs
   b. Wool
   c. Breeding stock

2. They are ruminants and have capacity for utilizing large amounts of roughage.

3. a. Flushing - Feeding prior to breeding
   b. First half of pregnancy
   c. Last half of pregnancy
   d. Suckling period
   e. Weaning time to flushing
   Each period requires special rations.

4. Consumers of large amounts of roughage in relation to grains

5. Digestible protein - .28 - .31lb.
   Total digestible nutrients - 2.2 - 2.6lb

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR BREEDING EWES

1. a. Corn
   b. Oats
   c. Bran
   d. Cottonseed meal
   e. Grain sorghums

2. Both are ruminants and have capacity for using large amounts of roughage.

3. Digestable protein -- .17-,20 lb.
   Total digestable nutrients -- 1.7-2.1 lb.

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-10

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Rormulating Rations for Fattening Lambs

1. a. Milk and grass fed lambs
   b. Feeder lambs
   c. Hothouse lambs

2. Providing an enclosure or pen which will allow the lambs to enter but will keep the ewes out. Feed is kept in the enclosure, available to the lambs at all times.

3. a. Margin
   b. Value of gain over cost of grain
   c. Wool clip
   d. Fertilizer value

4. Lambs on full feed will consume one to one and one-half pounds of roughage daily and one to one and one-half of concentrates daily.

5. Requirements: 50lb. Fattening Lamb
   Digestable protein - .16-.19
   Total digestable nutrients - 1.2-1.5

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR FATTENING LAMBS

1. Hothouse

2. Roughage

3. Pen or enclosure
Feed

4. 1 - 1-1/2 lbs. concentrates
1 - 1-1/2 lbs. legume hay

5. 50 to 60% concentrates
40 to 50% legume hay

6. 1/3 lb. gain

7. 250 to 350 lbs. of grain
400 to 450 lbs. of legume hay

8. D.P. -- .14-.18 lbs.
T.D.N. -- 1.2-1.5 lbs.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Brood Mares

1. Protein

2. No

3. They are bulky.

4. 3/4 to 1-1/2 lbs. of grain per 100 lbs. body weight 3/4 to 1-1/2 lbs. of hay per day

5. Mostly, sports, recreation or work energy, against meat or milk for other animals

6. 1.2 lbs. - Digestable protein
9.0-12.0 lbs. - Total digestable nutrients

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-12

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Growing Colts

1. A colt usually makes most of its growth during the first year, therefore, its growth should not be slowed at any point.

2. Yes

3. Colostrum is needed to increase the colt's resistance to bacterial infection.

4. Yes, to grow rapidly

5. 4 parts of grain
   3 parts of bran
   1 part of linseed meal

6. Yes

7. Digestable protein -- 1.0-1.2lbs.
   Total digestable nutrients -- 7.6-9.6 lbs.

8. 2 to 3 lbs. per day

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-12

Answer Sheet for Test
on
FORMULATING RATIONS FOR GROWING COLTS

1. 1/2
   First

2. Slowed

3. Colostrum
   Infection

4. 2 or 3

5. 4
   3
   1

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-13

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Brood Sows

1. Swine have a simple digestive stomach and grow more rapidly than other livestock.

2. Because of rapid growth

3. a. Before farrowing c. Suckling litters
   b. Farrowing time d. Weaning time

4. a. Efficient rations that furnish adequate proteins, vitamins, and minerals
   b. Laxative rations
   c. Correct amounts of feed to prevent excessive fattening
   d. Plenty of exercise
   e. Comfortable, sanitary quarters, with guard rails
   f. Freedom from pests

5. Hand feeding Self feeding

6. Maintain her body Produce a litter

7. Yes, but not excessively

8. Hand feeding helps to control over-fattening in sows.

9. 14 to 15%

10. Digestable protein -- .44-.50
    Total digestable nutrients -- 3.3-4.0

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR GROWING AND FATTENING PIGS

1. Rapid
   Efficient

2. Self
   Hand

3. Grain

4. Complete

5. Ten
   Twelve

Agricultural Education
Teaching Materials Center
College Station, Texas

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-14

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Rations for Growing and Fattening Pigs

1. a. Produce rapid gains
   b. Produce economic gains

2. 2/3

3. Because of confined feeding and need for better, more thorough mixing

4. a. Self feeding
   b. Hand feeding

5. Yes

6. Grains

7. a. Grains and balanced supplement, free choice
   b. Complete rations, free choice

8. 10 to 12%

9. Steamed bone meal - 38 lbs.
   Salt - 20 lbs.
   Limestone - 38 lbs.
   Trace mineral premix - 4 lbs.

[redacted] Digestable protein -- .55-.61
Total digestable nutrients -- 3.0-3.8

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING FEEDS FOR POULTRY

1. T
2. F
3. F
4. F
5. T

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Formulating Rations

TOPIC: Formulating Feeds for Poultry

1. Poultry have no teeth, the gizzard, with help of fine gravel, starts the break down of feed, and digestion is conpleted, much as other animals, in the intestines.

2. All feeds, including grain, are mixed together to form a complete ration.

3. Because of keeping and producing usually in confinement

4. Grains

5. Because very little information is available on the digestability of feeds by poultry.

6. In terms of amounts of total protein and other nutrients required per pound of feed

7. 20% - starting chicks
   15% - laying hens

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMS OF FEED AND THE BENEFITS DERIVED FROM THESE FORMS

1. a. Grinding c. Pelleting
   b. Rolling d. Crushing
   e. Cracking

2. Reduce waste.

3. a. Prevents selective eating
   b. Reduces waste
   c. Eliminate dust.
   d. Easier storage
   e. Reduces labor in feeding

4. a. Type of animal being fed
   b. Type of feed

5. Aids digestion by it being already partially broken down

Answer Sheet
for
FEED SALES AND SERVICE

UNIT: Feed Preparation

TOPIC: Forms of Feeds

1. a. Grinding
   b. Mixing
   c. Crushing
   d. Rolling
   e. Pelleting
   f. Crumbling
   g. Cracking

2. a. Character of the particular feed
   b. Kind of animal to which the feed is to be fed

3. Less waste

4. Yes

5. a. Prevents selective eating
   b. Reduces waste
   c. Eliminates dust
   d. Reduces labor in feeding
   e. Easier storage

6. Grains, because of hardness

7. Yes

8. Yes

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMS OF FEEDS FOR VARIOUS CLASSES OF LIVESTOCK

1. a. The kind of livestock
   b. The feed being fed

2. Cattle
   Swine

3. The small particles may cause "heaves".

4. The size of the animals being fed

5. Rolling adds bulk and swine may not consume enough.

6. The added bulk lessens digestive troubles.

7. Not necessarily. The grain can be eaten and digested without grinding.

8. Forage is difficult to pellet, but additives now have been developed that permit it.

Agricultural Education
Teaching Materials Center
College Station, Texas

Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet
for
FEED SALES AND SERVICE

UNIT Feed Preparation

TOPIC Forms of Feeds for Various Classes of Livestock

1 Swine
Cattle

2 No

3 Will be dusty, increasing possibility of "heaves"

4 Yes

5 Rolling causes feed to be too bulky.

6 Ration is lighter with fewer digestive problems.

7 Ration is lighter with fewer digestive problems.

8 No

9 No

10 Forages or Roughages

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Answer Sheet for Test
on
FORMULATING RATIONS FOR BROOD SOWS

1. T
2. F
3. T
4. T
5. T
6. F
7. T
8. F

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-1

Topic Test
on
IMPORTANCE OF ACCURATE RECORDS

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

1. An "operating statement" summarizes the __________ and __________ for a given period of time and shows the __________ or __________ for the period.

2. A "balance sheet" shows the ____________________ of the company at a given time.

3. Records of stocks and inventories are needed for determining the financial condition of the firm and for ____________________.

4. Total __________ and total __________ are always the same on a balance sheet.

5. On a balance sheet each item below would be either an "asset" or a "liability".
Which in each case?

   a. Land ______________.

   b. Taxes Payable ______________.

   c. Inventory ______________.

   d. Cash on land ______________.

   e. Accounts Payable ______________.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
SALES TICKETS

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

Check in the correct column:

T F

____ ____ 1. Sales tickets need to be numbered consecutively.

____ ____ 2. Once the cash register is balanced, sales tickets are no longer needed.

____ ____ 3. This entry would be sufficient for a sale ticket under description: "1 gal. insect poison".

____ ____ 4. The customer should sign "charge"tickets.

____ ____ 5. The best change for a $1.66 purchase when the customer presents a $10 bill would be three pennies, one 5¢ piece, one 25¢ piece and eight $1 bills.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
CREDIT

Student: __________________ School: __________________

Date: __________________ Score: __________________

True	False	
____	____	1. Productive credit is utilized to earn profits.
____	____	2. One source of farm credit is the Soil Conservation Service.
____	____	3. Checks should not be written in pencil.
____	____	4. A written claim against property is called a "note".
____	____	5. A cancelled check serves as a receipt.

Agricultural Education
Teaching Materials Center
College Station Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-4

Topic Test
on
DETERMINING SELLING PRICE

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Multiple Choice:

_____ 1 Costs that vary little or not at all are called (a) fixed (b) standard (c) recommended (d) fair-trade costs.

_____ 2. The amount added to the cost of an article to secure the selling price is called (a) margin (b) gross margin (c) net profit (d) markup.

_____ 3. If an item costs a merchant $1.00 and retails for $1.25, the markup is what percent?
(a) 125%
(b) 20%
(c) 25%
(d) 50%

_____ 4. Markup and gross margin are (a) the same in dollars and cents (b) different in dollars and cents (c) the same in percentage (d) always 25%.

_____ 5. "Turnover" is an expression used in business for (a) the number of times per year an item is sold and replaced (b) the practice of moving stock to keep it fresh (c) the moving of feed to keep it from hardening (d) the total merchandise ordered at any one time.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
BUSINESS RECORDS: ORDERING AND RECEIVING MERCHANDISE

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Multiple Choice:

____ 1. A receiving record will include
  a. Instructions for storage
  b. Condition of merchandise
  c. A catalog for future orders

____ 2. Freight charges are
  a. Always
  b. Never
  c. Sometimes paid by the seller

____ 3. A bill of lading will list the
  a. Number of packages in the shipment
  b. Cost of each article
  c. Suggested selling prices

____ 4. Statements of amounts due enumerating goods delivered are called:
  a. Price lists
  b. Bills of lading
  c. Invoices

Agricultural Education
Teaching Materials Center
College Station, Texas

Texas Education Agency
Texas A&M University
Cooperating

Topic Test
on
INVENTORIES

Student ______________________ School ______________________

Date ______________________ Score ______________________

True-False

________ 1. A physical inventory is an accurate record of merchandise on hand and its value

________ 2. Physical inventories are unnecessary if perpetual inventories are kept

________ 3. Inventory control helps to insure that enough goods are in the store

________ 4. Physical inventories are made at the end of a firms' fiscal year

________ 5. Physical inventory time is a good time to rearrange stock

BEST COPY AVAILABLE

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-7

Topic Test
on
RECEIVING AND STORING MERCHANDISE

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

Multiple Choice:

____ 1. Damage to a shipment should be noted (a) before unloading (b) as unloading proceeds (c) in the warehouse.

____ 2. Notes on damage in shipment should be (a) phoned to the supplier (b) disregarded (c) noted on the receiving form.

____ 3. "Shortages" often may be checked by (a) weight (b) asking the driver (c) comparing with last shipment.

____ 4. Merchandise delivered usually will be "signed for" by (a) the owner (b) the cashier (c) the employee receiving merchandise.

____ 5. Checks for substitutions may be made by (a) phoning the company (b) comparing to order (c) comparing to bill of lading.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

920-III-8

Topic Test
on
STOCKING AND MERCHANDISE PLANNING

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

1. Merchandise ordered too early results in poor use of ______________.
2. Merchandise ordered too late results in loss of __________________.
3. Who should call to the attention of the owner or manager to stock getting low? ______________________.
4. Who should know the location of merchandise in the store? __________ ________________.
5. Which should be sold first, old stock or new stock? ___________.

923-VI-1

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
FACTORS TO CONSIDER IN FORMULATING FEEDS

Student:______________________ School:______________________

Date:______________________ Score:______________________

PART I: Place a check under T for true or under F for false for each of the following statements:

T F

___ ___ 1. Protein is not a limiting nutrient in a ration.

___ ___ 2. Quality of protein is changed by less nutritious feed.

___ ___ 3. Lowest cost rations are not always best.

___ ___ 4. Variety in a ration makes a mixture more palatable or taste better to the animal.

___ ___ 5. All animals can digest or handle great amounts of fiber.

___ ___ 6. Dairy animals use little fiber.

___ ___ 7. Minerals should be in the ration or fed free choice.

___ ___ 8. Vitamins are not needed in extra amounts for cattle as long as they have feed.

___ ___ 9. Young animals and chicks need rations fortified with vitamin D and or A.

___ ___ 10. Some classes of cattle, such as high producing cows, need added carbohydrates and fats for extra energy.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-2

Topic Test
on
FORMULATING RATIONS FOR BROOD MARES

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Place a check under T for true or under F for false in each of the following statements.

T F

___ ___ 1. Horses differ from other animals in feed requirements because they use the feed nutrients differently.

___ ___ 2. The feeding of too much hay to horses may prevent their eating enough total nutrients.

___ ___ 3. Horses have large digestive systems in comparison to cattle and require more roughage.

___ ___ 4. Oats are popular for feeding horses because they are "bulky" as compared to other grains.

___ ___ 5. Horses normally will need a higher percent of grain in a ration than cattle or sheep.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-3

Topic Test
on
FEED ANALYSIS TABLES

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

What five things does a feed Analysis Table usually include about common feeds?

a. ______________________.

b. ______________________.

c. ______________________.

d. ______________________.

e. ______________________.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
COMMON METHODS OF BALANCING RATIONS

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

PART I: Fill in the blanks:

1. Two common methods in balancing rations are:

   a. ______________________________

   b. ______________________________

2. __________ standards and __________________ table must be available before starting to balance rations.

3. __________ is given more consideration on balancing with the "Square" method.

923-VI-5

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
FORMULATING RATIONS FOR DAIRY COWS

Student: ______________________________ School: ______________________

Date: ________________________________ Score: ______________________

PART I: Fill in the blanks:

1. Concentrates should be adjusted to each cows production to maintain ______________ production.

2. Good ____________ are necessary for low cost milk production.

3. Dairy cows are efficient users of large amounts of ______________.

4. To balance a dairy cows ration, a person needs to know the __________, __________________________, and __________________________.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-6

Topic Test
on
FORMULATING RATIONS FOR DAIRY HEIFERS

Student:____________________ School:____________________

Date:____________________ Score:____________________

PART I: Place a check under T for true or F for **false** for each of the following statements:

T	F		
____	____	1.	It is essential for dairy heifers to have adequate ration to maintain good body health and growth.
____	____	2.	A young dairy calf has same digestive system as a cow.
____	____	3.	Colostrum is not important to a young calf.
____	____	4.	Young dairy calves need extra amount of minerals, protein, and vitamins.
____	____	5.	Milk replacer is good for dairy calves not on the cow.
____	____	6.	Dairy calves will not eat grain and hay for several months.
____	____	7.	Rubbing grain or other dry feeds on nose of young calf after they have taken milk will help to start on feed sooner.
____	____	8.	Dairy animals should not be over fed as this aids development of excessive fat.
____	____	9.	Equal parts of steamed bone meal and salt will make good mineral supplement for dairy calves.
____	____	10.	Limited milk feeding plus a starter is one method of feeding young dairy calves.

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-7

Topic Test
on
FORMULATING RATIONS FOR BREEDING BEEF COWS

Student:____________________ **School:**____________________

Date:____________________ **Score:**____________________

PART I: Fill in the blanks:

1. The breeding beef herd must be kept as ____________ as possible.
2. Good ____________ is a vital key in economical beef production.
3. Calves are ____________ earlier, therefore well balanced rations are important.
4. ____________ fattening is expensive.
5. Three things important to consider in feeding the breeding herd are:

   (a) ________________________.

   (b) ________________________.

   (c) ________________________.
6. Winter feeding sometimes causes deficiencies in ____________ and ____________.
7. Calf crop ____________ is greatly affected by the rations for the breeding beef cow.
8. Cows can be fed in winter on ____________ alone, but it must be a good quality ____________ hay.

923-VI-8

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
FORMULATING RATIONS FOR FATTENING CATTLE

Student:______________________ School:______________________

Date:______________________ Score:______________________

PART I: Place a check under T for true or under F for false for each of the following statements.

T F

____ ____ 1. Cattle fattening requires little risk or capital outlay.

____ ____ 2. Margin and gain are two sources of profit in beef fattening.

____ ____ 3. Hormones and urea does not have to be fed cautiously or require thorough mixing.

____ ____ 4. Pasture fattening is very expensive.

____ ____ 5. All grains may not be fed successfully to cattle.

____ ____ 6. Urea may be substituted for part of the protein in ration for economy.

____ ____ 7. Silage is a dry roughage.

____ ____ 8. Cattle should be placed on feed slowly and gradually.

____ ____ 9. Older cattle make more gain per 100 pounds of feed fed.

____ ____ 10. Fattening cattle as yearlings utilizes more roughage.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-9

Topic Test
on
FORMULATING RATIONS FOR BREEDING EWES

Student:____________________ School:____________________

Date:____________________ Score:____________________

PART I:

1. Name five feeds commonly fed breeding ewes.

   a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

   e. ____________________

2. How is the feeding of sheep similar to that of cattle? ____________________
____.

3. Determine need for a pregnant ewe, weighing 110 pounds, 6 weeks before lambing. (use Feeds and Feeding, abridged, eighth edition.)

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-10

Topic Test
on
FORMULATING RATIONS FOR FATTENING LAMBS

Student:________________________ School:________________________

Date:________________________ Score:________________________

PART I: Fill in the blanks:

1. Lambs dropped in the fall and pushed to market in 6 to 12 weeks and weigh in 30 to 60 pounds are called ______________ lambs.

2. ______________ makes up a large part of the lamb's ration.

3. A "creep" is a ______________ with __________ available at all times.

4. Lambs on full feed usually eat _________ pounds of hay and __________ pounds of concentrates per head daily.

5. The most economical lamb fattening ration __________ percent concentrates and __________ percent legume hay.

6. _____ of a pound gain per day is the grain that might be expected to be average.

7. The feed requirements for 100 pounds of gain on lambs is _____ to _____ pounds of grain and _____ to _____ pounds of legume hay.

8. Using Feeds and Feeding, Morrison, eighth edition; give the digestable protein and total digestable nutrients for a 60 lb. lamb.
   D. P. ____________________.

   T. D. N. ____________________.

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-12

Topic Test
on
FORMULATING RATIONS FOR GROWING COLTS

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

Fill in blanks with words or statements.

1. A colt should make __________ of its growth the ______ year.

2. The colt's growth should not be _________ at any point.

3. _______________ is important to the colt in early days to reduce bacterial ____________.

4. A colt should be eating ______ to _________ pounds of concentrates daily by weaning time.

5. A good feed mixture for a colt _____ parts of grain, ____ parts of bran, and ____ part of linseed or cottonseed meal.

Agricultural Education
Teaching Materials Center
College Station, Texas

******

Texas Education Agency
Texas A&M University
(cooperating)

923-VI-13

Topic Test
on
FORMULATING RATIONS FOR BROOD SOWS

Student: ____________________ School: ____________________

Date: ____________________ Score: ____________________

Place a check under T for true or under F for false for each of the following statements:

T F

___ ___ 1. The brood sow must have proper feeding to produce thrifty litters.

___ ___ 2. Swine have the same type of digestive system as cattle.

___ ___ 3. Sows must use their feed for maintaining their body and producing pigs.

___ ___ 4. One requirement for rations for brood sows is for the ration to be in amounts not to cause over fattening.

___ ___ 5. Swine grow more rapidly than other livestock.

___ ___ 6. Rations for sows must be self fed.

___ ___ 7. The corn-hog ratio is number of bushels of corn required to buy 100 lbs. of pork.

___ ___ 8. Sows do not need pasture and plenty of exercise.

Agricultural Education
Teaching Materials Center
College Station, Texas
****
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-14

Topic Test
on
FORMULATING RATIONS IN GROWING AND FATTENING PIGS

Student: ______________________________ School: ______________________________

Date: ______________________________ Score: ______________________________

Fill in the blanks with correct word or statement.

1. The primary aim in fattening pigs is to produce __________ and __________ gains.

2. Two methods of feeding fattening pigs are ______ feeding and ______ feeding.

3. ________ makes up the greater part of the types of feed in pig rations.

4. ____________ balanced rations are usually more satisfactory for fattening pigs for gain and effeciency.

5. ______ to __________ percent protein is adequate for growing and fattening pigs above 150 pounds of weight.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VI-15

Topic Test
on
FORMULATING FEEDS FOR POULTRY

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Place a T for true and an F for false for each of the following statements:

_______ 1. The digestive system of poultry is different from other farm animals.

_______ 2. Poultry reared in confinement have no problems in nutrients.

_______ 3. Poultry can use a lot of roughage.

_______ 4. Feed standards for poultry are expressed by size or age.

_______ 5. Most poultry feeds are mash or pellet rations.

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

Topic Test
on
FORMS OF FEEDS

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Answer the following questions:

1. Five forms of feed preparation are:
   (a) ______________________
   (b) ______________________
   (c) ______________________
   (d) ______________________
   (e) ______________________

2. The chief advantage of pellets or cubes is: ______________.

3. Five advantages of an all pellet ration are:
   (a) ______________________
   (b) ______________________
   (c) ______________________
   (d) ______________________
   (e) ______________________

4. The two factors that determine the value of crushing or grinding feeds are:
   (a) ______________________
   (b) ______________________

5. How does grinding feeds help older cattle?

Agricultural Education
Teaching Materials Center
College Station, Texas
******
Texas Education Agency
Texas A&M University
(cooperating)

923-VII-2

Topic Test
on
FORMS OF FEEDS FOR VARIOUS CLASSES OF LIVESTOCK

Student: ______________________ School: ______________________

Date: ______________________ Score: ______________________

Answer the following questions:

1. What will determine whether or not feed should be ground for livestock?
2. What two classes of livestock may use feed more efficiently if the feed is soaked?
3. Why is feed finely ground dangerous for horses?
4. What determines the best size for pellets?
5. Why is rolled feed not desirable for swine?
6. Why is rolled feed desirable for show cattle?
7. Should 9-12 month old calves have ground feed? Why, or why not?
8. Why is pelleting of forage relatively new?